



# FULLERTON COLLEGE



# 2021-22 Course Catalog

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# FULLERTON COLLEGE



## 2021-2022 Course Catalog

North Orange County Community College District  
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 Telecommunication Device for the Deaf - (714) 871-9192  
[www.fullcoll.edu](http://www.fullcoll.edu) (<http://www.fullcoll.edu>)

Fullerton College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC), <http://www.accjc.org>, Western Association of Schools and Colleges (WASC), <http://www.acswasc.org>, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education and the California State Department of Education.

## Foreword

Fullerton College publishes a new catalog every year. The information published in the catalog is effective for the academic year beginning with the fall semester and concluding with the summer intersession. **This catalog is effective Fall 2021 through Summer 2022.**

## Statement of Assurance

Every effort is made to ensure that the course information, applicable policies, and other materials presented in the Fullerton College Catalog are accurate and current. In the event a correction or update is warranted, this e-catalog will absorb that change, and a catalog addendum can be viewed on the main page under "Updates to the Catalog".

## Catalog Rights

The requirements for degrees and certificates may change during the time a student attends Fullerton College. Catalog rights are established when a student first takes classes at Fullerton College, and they are maintained through continual enrollment at the college. These rights protect students from being held responsible for changes made to their academic programs in the years that follow their initial enrollment. Students maintain catalog rights by maintaining **continuous** enrollment at Fullerton College – that is, by receiving a grade of "A," "B," "C," "D," "F," "CR," "P," "NC," "NP," "RD," "W," or "I" on their transcripts for at least one course per academic year. Documented military or medical leave during the academic year will not be considered

an interruption of enrollment. This policy supersedes all previous catalog rights provisions and applies only to programs at Fullerton College.

## Notice to Students

The information contained in this catalog is advisory only and does not constitute a contractual agreement by the college or guarantee that course content will be strictly followed or fulfilled. Fullerton College and the North Orange County Community College District reserves the right to change at any time, without notice, academic requirements to graduate, curriculum course content and structures, and such other matters as may be within their control, notwithstanding any information set forth in this catalog.

## President's Message

TBD

## North Orange County Community College District

NOCCCD is part of the California Community College system, one of three segments of public post-secondary education in the state. A seven-member Board of Trustees, elected by the citizens of the district, governs all programs and activities of the NOCCCD.

## Board of Trustees

Ryan Bent  
 Stephen T. Blount  
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Erin Lacorte, Student Trustee, Fullerton College  
 Meena Pandian, Student Trustee, Cypress College

Fred Williams, Chancellor (Interim)

# Academic Calendar

## Academic Calendar 2021–2022 <sup>1</sup>

Fullerton College operates on a 16-week semester

### 2021 Fall Semester

#### August 23–December 11, 2021

Monday, August 23	Fall Semester Begins
Monday, September 6	Labor Day (Campus Closed)
Thursday, November 11	Veterans Day (Campus Closed)
Thursday, November 25 - Sunday, November 28	Thanksgiving Weekend (Campus Closed)
Saturday, December 11	Fall Semester Ends
Thursday, December 23 - Sunday, January 2, 2022	Winter Holidays

### 2022 Spring Semester

#### January 24 – May 21, 2022

Monday, January 3	Winter Intersession Begins
Friday, January 21	Winter Intersession Ends
Monday, January 17	Martin Luther King Holiday (Campus Closed)
Monday, January 24	Spring Semester Begins
Friday, February 18 - Monday, February 21	President's Day Weekend (Campus Closed)
Monday, March 21 - Sunday, March 27	Spring Recess (no classes)
Thursday, March 24	Cesar Chavez Holiday (Observed)
Friday, March 25	Spring Holiday
Saturday, May 21	Commencement
Monday, May 30	Memorial Day

### 2022 Summer Session – to be announced

<sup>1</sup> Dates and deadlines are subject to change.

## Academic Information

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## Academic Honors

### Dean's Honor List

Students who officially complete (as shown on their transcript) 12 or more degree applicable units in a semester and earn a grade point average between 3.0 and 3.74 are placed on the Dean's Honor List.

### President's Honor List

Students who officially complete (as shown on their transcript) 12 or more degree applicable units in a semester and earn a grade point average of 3.75 or above are placed on the President's Honor List.

### Honors at Graduation

Students whose cumulative grade point average (excluding non-degree credit courses) is 3.30 or higher will graduate with honors. High honors are awarded to those graduating with a cumulative grade point average (excluding non-degree credit courses) of 3.75 or higher. **Spring grades will not be used in computing the grade point average for the graduation ceremony, but will be used in determining the final grade point average for the diploma.** All transfer work (with the exception of upper division units) from other colleges will be used in computing grade point average at graduation.

## Acceptance of Transfer Credits

Evaluation of other college coursework must be requested by students through the Fullerton College Counseling Division. Students transferring from colleges accredited by regional accrediting organizations as recognized by the Council for Higher Education Accreditation will be granted lower division credit for courses entered on official transcripts (ACCJC, HLC, MSCHE, NECHE, NWCCU, SACSCOC, and WSCUC) <https://www.chea.org/regional-accrediting-organizations> (<https://www.chea.org/regional-accrediting-organizations/>).

Students requesting credit for previous coursework from foreign colleges or universities must have their transcripts evaluated by an approved credential evaluation service. Students may only receive elective credit for up to 30 units of lower division coursework. Students with foreign transcripts are strongly encouraged to speak with a Fullerton College Counselor before ordering an evaluation.

Transferring units will be posted at the time of graduation.

A maximum of 9 upper division units can be counted as elective units. Upper-division units will not be counted toward general education or major. Grades from upper division courses will not be used when calculating the GPA.

## Adding or Dropping a Class

All adds, drops and withdrawals are to be completed ONLINE through myGateway by the established deadline dates.

- Students who choose to **Waitlist** into a class must meet all registration requirements, including time conflicts and prerequisite requirements. Waitlisting does NOT guarantee enrollment into any class and not all classes have waitlists.
- **Add authorization codes** are required to officially enroll in a class once the class begins and must be used by the add deadline.
- **Short-term courses** are regularly schedule classes meeting less than the full length of the term, or self-paced classes in which students may enroll at various times throughout the term. Refer to the Class Schedule for deadlines.
- A **Section Change** can be one of the following:
  - dropping a course and replacing it by transferring to a section that has different hours, days, instructor for the same course (must be the same course length)
  - transferring from a lower to a higher-level course
  - transferring from a higher to a lower-level course
  - **Drops and/or Withdrawals** from class(es) is the student's responsibility. Failure to officially withdraw from a class may result in a grade of "F" or "NP" being assigned.

## Attendance

Regular and prompt attendance in class and laboratory sessions is expected of every Fullerton College student. Students, therefore, should be thoroughly informed of and should comply with the following attendance regulations:

**Attendance at the first class meeting** is advised because of enrollment demands. Any student not reporting to the first class may be dropped by the instructor. In the case where a class is taught entirely online, instructors may drop students who have not been in contact with the instructor by the end of the first day of classes for that semester or short-term session. **Students should not rely on the instructor to drop them from classes. Non-attendance does not constitute an official drop. Failure to officially withdraw may result in a failing grade.**

## Absences

By direction of the Chancellor of Community Colleges of California, attendance shall be taken at all class sessions. Absences are handled as follows:

After a student accumulates in any class more than a week's absences (more than the number of times the class meets per week), consecutive or nonconsecutive, an instructor may drop the student according to the drop deadline dates.

For short-term or intersession classes, an instructor may drop a student who accumulates absences greater than the equivalent of one week of class during a regular semester.

For online classes, an absence may be identified as a missed assignment and/or inactivity in the course site.

Non-attendance or non-payment for a class does not release students from their responsibility to drop a class and may result in a failing grade being awarded.

## Illness and Authorized Absences

1. If a student accumulates an excessive number of absences due to illness or other reasons, and the instructor feels that the student can

no longer profitably continue in the course, the instructor **may** drop the student from class.

2. A student who must miss one or more classes because of a field trip or other authorized activity, such as athletics or music groups, may obtain an Authorized Absence Excuse from the instructor under whose supervision the activity will occur. The student shall have this excuse signed by the instructors of the classes that will be missed before the absence occurs. It is recommended that this form be completed at least two days before the activity. The signed excuse must be presented to the instructor in charge of the activity.
3. No absence excuses a student from making up the work missed. Students should realize that every absence may adversely affect their grades.
4. In the event a student is absent for a prolonged period of time, it is expected that the student will make contact with all instructors immediately to advise the instructor of this absence and the reasons behind it. The instructors can then decide whether or not the student may continue in the class or withdraw. It should be noted that failure to make this contact and follow through with the instructors could result in the student receiving a substandard grade in the class.
5. If a student currently serving in the armed forces or state military presents with official orders to complete service obligations and will be absent for a short period of time (2 weeks or less) faculty will provide the student the opportunity to complete the missed work and return to class the following week after the completion of service obligation. If the student is assigned military orders for more than two weeks, the student will be permitted to submit for an incomplete.

## Audit Policy

Auditing of designated, approved college courses is permitted under specific conditions. Students may audit a designated course **only** if they have previously taken the course and received a passing grade and/or taken the course the maximum times allowable at Fullerton College.

An enrolled student choosing to audit a course must file an "Audit Request Form" with the Admissions & Records Office no **later than the add deadline of the course**. Both instructor and Division Dean approval is required prior to submitting the form. Once the request has been made, students will not be permitted to change from an audit to a credit status.

Fees charged for auditing college courses are subject to change. The fees per unit do not include the additional mandatory health fee. All students are strongly encouraged to purchase the campus photo ID card. All fees are payable at the time of submitting the petition. **(Fees are not refundable.)** Students on fee waivers must pay the auditing fees.

## Classification of Students

Students are classified based on their class load as follows:

Full-Time	Enrolled in 12 or more units
Part-Time	Enrolled in fewer than 12 units
Freshman	Fewer than 30 units completed
Sophomore	30 or more units completed

A maximum load for any student is 19 units. Exception to the 19-unit maximum may be available with counselor approval.

It may be pertinent for students to consider the following semester unit requirements for particular privileges and activities:

**Associated Students Elected Office:** 5 units per semester, unless otherwise listed in "Eligibility For Student Offices," form available in the Office of Student Activities (Room 223).

**Athletic Eligibility:** Full time: 12 units including P.E. classes

**Veterans** — See Veterans Resource Center (Room 518)

**Work Study and Financial Aid** — Full time: 12 units per semester; 3/4 time: 9 units per semester; 1/2 time: 6 units per semester

## Work Hours/Class Guidelines

For each hour spent in class, a student should plan to spend about two hours in study and homework. On the 16-week calendar, a full load of 15 units will equate to 17 hours of class time plus 34 hours in study and homework for a total of 54 hours a week — more than a full-time work week. Following are suggested work hours/class guidelines:

Working Hours/Week	Units
None	12 - 16
10	10 - 11
20	7 - 9
30	3 - 6
30+	1 - 3

In order to maintain an academic balance, the following information should be considered:

1. Students can expect to spend at least 3-1/2 hours (one hour and 10 minutes in class and two hours and 20 minutes outside of class) per week for each unit taken.
2. Employment time and college time combined should not exceed 60 hours weekly.
3. Students should distribute study time appropriately for each class — often preparation for a lecture class differs from preparation for a laboratory class.
4. Students should consult frequently with their instructors — their office hours are designed for that purpose.
5. To assist in their academic success, students should use the tutoring services, the library, counselors, and other support services.

## Course Progression

Students are expected to take courses on an accepted progressive basis. Students will not receive credit for classes which are considered lower in degree of advancement than those already completed.

## Course Repetition

### Passing Grade

A course in which a student has earned an "A," "B," "C," "CR" or "P" may only be repeated as indicated in the catalog.

Once a student has completed the maximum number of allowable repetitions, a student may be blocked from registering in this course. Active participatory courses that are grouped by related content in the areas of fine arts and physical education will count toward the maximum allowable repetitions. A student may file a petition for an exception in the Admissions and Records Office. This petition must be approved before the student will be permitted to register.

## Substandard Grade

Students may repeat the same course no more than two times in colleges within the District in which substandard grades ("D," "F," "NC," "NP" or "W") were assigned. Students may file a Petition to Repeat a Course to request additional repeats due to verifiable extenuating circumstances. Petitions may be filed in the Admissions and Records Office.

### Course Repeat Adjustment Request (request to exclude "D", "F", "NC" or "NP" Grades)

If a student previously received a "D", "F", "NC" or "NP" in a course taken at Fullerton College and repeats the same course, the student may file a Course Repeat Adjustment Request (request to exclude "D", "F", "NC", or "NP" grades). On repetition, the last grade earned will count towards the grade point average and the previous grade(s) will be discounted or forgiven. Only the first two substandard grades within North Orange County Community College District (NOCCCD) may be excluded in GPA calculations. The student's permanent academic record will be annotated such that all course work that has been taken and forgiven or repeated will remain legible, ensuring a true and complete academic history.

Fullerton College reserves the right to adjust repeated courses without the Course Repeat Adjustment Request Form before processing any student-initiated petitions, graduation applications, and/or GE certification requests.

## California Code of Regulations and Course Repeatability

Prior to Fall 2013 courses that develop similar skills (a) at increasingly sophisticated levels of practice, and/or (b) that are applied to different content (such as a drama course in which students master increasingly demanding roles in different plays) may have been offered as repeatable courses. Recent changes have been made to portions of Title 5 of the California Code of Regulations governing repetition of credit courses. The general rule from this change in Title 5 is that district policy may not permit a student to repeat a credit course if the student received a satisfactory grade on the previous enrollment. A satisfactory grade would include A, B, C, CR, or P. Title 5 regulations allow for exceptions to the general rule that include:

- Courses properly designated by the district as repeatable,
- A subsequent enrollment due to significant lapse of time,
- Variable unit courses offered on an open-entry/open-exit basis,
- Extenuating circumstances,
- Occupational work experience courses,
- Students with disabilities repeating a special class,
- Legally mandated courses, and
- Courses necessary as a result of significant change in industry or licensure standards.

For an additional enrollment to be allowed for any of the exceptions listed above except the first bullet the student must meet the circumstances specified in the regulations for the specified exception. For a course to be designated as repeatable by the district it must meet certain criteria. The new regulations on course repetition apply to a district meaning that a student may not repeat a course or its equivalent taken at either Fullerton College or Cypress College.

Beginning with the Fall 2013 semester district policy may designate only three types of courses as repeatable:

- Courses for which repetition is necessary to meet the major requirement of a California State University (CSU) or University of California (UC) for completion of a bachelor's degree,
- Intercollegiate athletics, and
- Intercollegiate academic or vocational competition.

Courses that do not fall under one of the three types listed above may not be designated as repeatable. Student enrollment in a repeatable course is limited to what is necessary for the first two years of undergraduate education which equates to a maximum of four enrollments. In some instances, depending on the course, the number of enrollments may be less than four. In the determination of the total number of enrollments a district must count all prior enrollments by a student in a course or courses that should be equated.

Additional enrollment limitations have been placed on active participatory courses that are related in content in physical education (PE), visual arts, and performing arts. As indicated above all active participatory courses in these areas, if they do not meet one of the three criteria that allow it to be repeatable, can only be taken once for credit. If there exists a group of courses related in content in physical education, visual arts and performing arts that are active participatory then a student is limited to a total of four enrollments within each group of these courses.

## Lapse of Time

Students may repeat a course where the student has received a satisfactory grade and there has been a "significant lapse of time" since completion of the class. Fullerton College has defined a "significant lapse of time" as five (5) years. Students who believe they have extenuating circumstances may submit a Petition to Repeat a Course. Petition forms are available in the Admissions and Records Office. (Title 5, Section 55043).

## Course Substitutions

A course substitution is the process of receiving formal approval from an academic division to use one or more courses to satisfy specific course requirements in a major for an Associate Degree or Associate Degree for Transfer at Fullerton College. An official Petition to Substitute Graduation Requirements must be approved by the division dean for the student's major, and is valid for two years from the time it is approved. Petitions are not transferable to other majors. Substitution petitions are required for all potential courses used for an Associate Degree for Transfer major taken at private or out-of-state colleges and universities or at the University of California, and may also be required for courses taken at a California State University or at other California Community Colleges. **Students are advised to seek guidance from a counselor for a review of their other college transcripts to determine where substitutions are appropriate.**

## Credit by Examination

The basic purpose of Credit by Examination is to allow unit credit for prior or advanced knowledge of class material by the student. Currently enrolled students may be permitted to obtain Credit by Examination in subject matter fields in which they are especially qualified through previous training or experience for which credit or advanced placement has not previously been given. Only those courses approved for Credit by Examination will be eligible. Examinations will be sufficiently comprehensive to determine that the student has essentially the same knowledge and skills as a student who successfully completes the course.

**Credit by examination is available under the regulations listed below:**

1. Any currently enrolled student not on academic probation may challenge a course subject to the approval of the division offering the course. Not all courses may be challenged. Divisions allowing credit by examination are Business and Computer Information Systems, Fine Arts, Natural Science (BIOL 101 F and BIOL 102 F **only**), and Technology and Engineering. Contact the appropriate Division Office for information.
2. A student may challenge and receive credit for a maximum of twelve semester units. **EACH COURSE MAY BE CHALLENGED ONLY ONCE.**
3. The student has the option of receiving an earned letter grade on the transcript for all challenged courses.
4. The division may stipulate that a grade of Pass (P) will be granted instead of a letter grade.
5. No student will be allowed to challenge a course less advanced than that which the student has already completed, and no challenge will be allowed for a course in which the student has previously enrolled and received a grade.
6. No challenge will be allowed for a course in which a student is enrolled after the first two weeks of the semester.
7. Students must pay enrollment and health fees.
8. Students on fee waivers must pay the enrollment fees for credit by examination.
9. Credit will not be posted to the transcript until all fees, fines, or holds have been resolved.

## Procedure

To initiate a petition for Credit by Examination, the student must confer with either an instructor teaching the course or the appropriate Division Dean. If it is determined that the student's prospects for success in the examination are satisfactory, the student will complete the Credit by Examination petition, obtaining the signatures of the instructor and the Division Dean. Petitions are available in the division offices. The time and place of the examination, its content, and the arrangement for its administration are determined by the division.

## Distance Education - Online and Hybrid

Fullerton College offers Distance Education courses as an option to traditional, on campus, face-to-face courses. As defined by Title 5 § 55200, Distance Education is "*instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology.*"

While providing students with quality instruction, Distance Education offers access on and off campus, convenience and flexibility. Delivery options include:

**Online** — offered primarily or mostly online. Note: Some instructors may require coming to campus for orientation and/or testing.

**Hybrid** — combines a percentage of class time online and a percentage on campus.

The registration process, fees, and academic credit are the same for Distance Education courses as for traditional on campus courses. For registration and specific course information, go to: [www.fullcoll.edu](http://www.fullcoll.edu). (<http://www.fullcoll.edu>.)

## Fullerton College Student Learning Outcomes

Student Learning Outcomes (SLO) are defined in terms of the knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences. Fullerton College has SLOs for courses (course-level SLOs), programs (PSLOs) and at the institutional level. More information about the College SLOs can be found on the website (<http://slo.fullcoll.edu>).

### Institutional Student Learning Outcomes (ISLO)

The Institutional Student Learning Outcomes (ISLO) for Fullerton College are designed to reflect the college's General Education outcomes and are intended as knowledge, skills, abilities, and attitudes students will develop as a result of their overall experience at the college. Upon successful completion of transfer curriculum and/or when receiving an Associate's degree from Fullerton College, a student will have learned competency in all of the ISLO areas. Measurement of these ISLOs will be at the course level.

Students who complete certificates at the college will have benefit of some number of the ISLOs and measurement of those will be at the program level.

A single course is not expected to meet all the ISLOs, but each course does contribute to at least one of the ISLOs.

#### Communication

Communicate clearly and appropriately for a variety of purposes and audiences.

#### Critical Thinking and Information Competency

Analyze and synthesize data/information in a variety of forms (numerical, textual, graphic) for the purpose of interpretation, problem solving, and decision making.

#### Global Systems Awareness and Ethical Citizenship

Analyze the interconnectedness of racial, cultural, political, social, economic, and environmental issues from multiple perspectives and recognize the individual agency and collective responsibility necessary for positively influencing those systems.

#### Aesthetic Appreciation and Production

Interpret, appreciate, and create artistic forms of knowledge and expression.

#### Personal Responsibility and Professional Development

Articulate personal values and goals as well as explain the skills, mindsets, and behaviors necessary to achieve well-being and professional success.

### Program-Level and Course-Level SLOs

The program-level SLOs can be found in the catalog embedded in the description of each program and Course-Level SLOs are printed in the syllabus provided by the instructor for each course.

## Grading System

### Grades and Grade Point Average

Student performance in courses is indicated below. Grades which carry point value, and which are used in determining the grade point average (GPA), are as follows:

Symbol	Definition	Grade Points Per Unit
A	Excellent	4
B	Good	3
C	Satisfactory	2
D	Passing, less than Satisfactory	1
F	Failing	0

The following are not part of the GPA computation:

Symbol	Definition	Grade Points Per Unit
P	Pass	at least satisfactory – units awarded not counted in GPA
NP	No Pass	less than satisfactory, or failing – units not counted in GPA
W	Withdrawal	No units granted
UD	Ungraded	No units granted
EW	Excused Withdrawal	

The meaning of each symbol is as follows:

**A** – Superior or Excellent (4 grade points). Honor grade indicating excellence earned as a result of consistently superior examination scores; consistently accurate and prompt completion of assignments; ability to deal resourcefully with abstract ideas; superior mastery of pertinent skills; and promise of success in field relating to the subject.

**B** – Better than Average – Good (3 grade points). Honor grade indicating competence earned as a result of high examination scores; accurate and prompt completion of assignments; ability to deal well with abstract ideas; commendable mastery of pertinent skills; and promise of continued success in sequential courses.

**C** – Average – Satisfactory (2 grade points). Standard college grade indicating successful performance earned as a result of satisfactory examination scores; generally accurate and prompt completion of assignments; ability to deal with abstract ideas; average mastery of pertinent skills; and sufficient evidence of ability to warrant entering sequential courses.

**D** – Less than Satisfactory (1 grade point). Substandard grade indicating the meeting of minimum requirements only earned as a result of low examination scores; generally inaccurate, incomplete or late assignments; inadequate grasp of abstract ideas; barely acceptable mastery of pertinent skills; or insufficient evidence of ability to make advisable the enrollment in sequential courses.

**F** – Failing (no grade points). Non-passing grade indicating failure to meet minimum requirements earned as a result of non-passing examination scores; inaccurate, incomplete or late assignments; failure to cope with abstract ideas; inadequate mastery of pertinent skills; or repeated absence from class. "F" grades are figured in total units attempted in computing the grade point average.

### How to Calculate a GPA

1. Multiply the grade value of the course by the units attempted for that course. The product of this multiplication will be the grade points.

2. Divide the cumulative grade points by the cumulative units attempted.

Example:

Course	Grade Value	Multiply	Units Attempted	Equals	GPA HRS (units attempted)
MATH 100 FA = 4		x	4	=	16
ENGL 060 F B = 3		x	4	=	12
GEOG 100 F C = 2		x	3	=	6
PE 215 F D = 1		x	2	=	2
PHIL 100 F F = 0		x	3	=	0
<b>TOTALS:</b>			<b>16</b>		<b>36</b>

Divide 36 (Grade Points column) by 16 (Units Attempted column) and the G.P.A. = 2.25

## Pass/No Pass Policy

Courses in which **P (Pass)/NP (No Pass)** grading is allowed are designated in the class schedule and in the course descriptions in this catalog. P/NP is not the same as auditing.

**P – Pass** is equivalent to the satisfactory grade of “C.” “P” will award units completed, but will not be computed into the grade point average.

**NP – No Pass** is a substandard grade, equivalent to the grades of “D” or “F.” “NP” grades will not be computed into the grade point average, but will enter into calculations for progress probation.

If a course is listed in the College Catalog as “Letter Grade or Pass/No Pass option”, a student may choose to take the course with a P/NP grade. Once the request is submitted, the grading option is *not* reversible. Students may enroll in up to six units each semester in courses with a PASS/NO PASS option.

Students should investigate the policies of the institutions to which they may wish to transfer to determine the acceptability of P (Pass) grades in courses in the student’s major, since many universities and colleges do not accept P (Pass) grades in such courses. Many institutions will consider an NP (No Pass) as a failing grade. Likewise, students planning for graduate work should realize that some graduate schools do not look favorably on P grades.

## Non Evaluative Grades

**Incomplete grades** – Incomplete academic work at the end of the term caused by unforeseeable, emergency and justifiable reasons may result in an incomplete grade symbol being entered in the student’s record. The condition of removal of the incomplete grade and the final grade to be assigned shall be documented by the instructor and provided to the student. A final grade shall be assigned when the work stipulated has been completed and evaluated or when the one-year time limit for completing the work has passed.

The incomplete grade must be made up no later than one year following the end of the term in which it was assigned. The incomplete grade symbol shall not be used in calculating units attempted nor for grade points.

A student may petition for a time extension due to unusual circumstances through the Admissions and Records Office. A student may not re-enroll in

a class for which an incomplete grade symbol is shown on the student’s transcript.

**IP – In Progress.** The “IP” symbol shall be used to denote that the class extends beyond the normal end of an academic term. It indicates that work is “in progress,” but that assignment of an evaluative grade must await its completion. The “IP” symbol shall remain on the student’s transcript in order to satisfy enrollment documentation. An “IP” symbol shall not be used in calculating grade-point averages. **The student *must register in the same course for the next semester. Failure to do so will result in an assignment of a grade by the instructor in place of the “IP”***

**MW – Military Withdrawal.** Upon verification of military orders, the symbol “MW” will be assigned to students who are called to military service and withdraw from courses. Military withdrawal shall not be counted in progress probation or dismissal calculations.

**RD – Report Delayed.** The “RD” symbol may be assigned by the Dean of Admissions and Records only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. “RD” shall not be used in calculating grade-point averages.

**W – Withdrawal.** A “W” is a grade indicated when the student has withdrawn from a course. It is not included in the grade point average computation. (See “Withdrawal Policy (p. 18).”)

**EW - Excused Withdrawal.** Verifiable documentation must be presented upon petition by the student to Admissions & Records. The symbol “EW” will be assigned to students who are approved via Extenuating Circumstance Petition. Excused Withdrawal shall not count in calculation of probation or dismissal and is not counted as an enrollment attempt for purposes of course repetition. The “EW” symbol does count in the Federal financial aid Satisfactory Academic Progress Calculations.

## Assignment of Grades

The final grade is wholly within the responsibility of the instructor, regardless of whether it is an A, B, C, D, F, P, NP, I, IP or W.

**Please Note:** In a number of courses, principally in English, foreign languages, science and mathematics, a student may not progress to a more advanced study in a subject in which the student has received a “D” grade.

## Non-Degree Credit Courses

Non-degree credit courses are courses that earn credit, but are **not** counted toward the 60 units required for the associate degree. Non-degree courses are intended to assist students in performing the skills needed for college level courses. Non-shy;degree courses do apply toward residency, athletic eligibility, work study and financial aid, veteran’s benefits, associated student body office, and full-time status. The degree or non-degree credit status is indicated at the end of every course description.

# Honors Program

College Center, Room 212, 1st Floor  
(Transfer Center)

The Fullerton College Honors Program is designed to meet the needs of students who seek a challenging educational experience that goes beyond the regular degree program. The Honors Program incorporates a stimulating interdisciplinary approach for a more in-depth investigation of topics. Classes are kept intentionally small (20-25 students) to facilitate a discussion/seminar rather than lecture format. A reduced class size also encourages a more collaborative learning experience where students from different backgrounds and disciplines can interact more freely with each other and with the faculty members.

Honors students are eligible for special scholarships at Fullerton College and the opportunity to apply for Honors scholarships at four-year transfer institutions. Honors students may also apply to the Collegiate Honors Council. Honors students will have Honors sections designated on their transcripts, and students who complete the Honors Program requirements will have a special designation on their transcripts and degrees. Students in the Honors Program will also be eligible for priority and/or guaranteed transfer in their major to selected colleges and universities. For further information and application forms, please contact the Honors Program at Fullerton College at (714) 992-7133 or visit our website at <http://honors.fullcoll.edu>.

Code	Title	Units
<b>HONORS COURSES</b>		
ACCT 102HF	Honors Financial Accounting	5
ANTH 101HF	Honors Physical Anthropology	3
ANTH 102HF	Honors Cultural Anthropology	3
ANTH 103HF	Honors Introduction to Archaeology	3
ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	3
ART 113HF	Honors Art History - Renaissance to Modern	3
ART 196HF	Honors Creative Arts - Art	3
BIOL 101HF	Honors General Biology	5
BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	3
BUS 240HF	Honors Legal Environment of Business	3
CIS 100HF	Honors Introduction to Personal Computers	4
CIS 111HF	Honors Introduction to Information Systems	4
ESC 116HF	Honors Astronomy	3
ESC 130HF	Honors Introduction to Oceanography	3
ECON 101HF	Honors Principles of Economics - Micro	3
ECON 102HF	Honors Principles of Economics-Macro	3
ENGL 100HF	Honors College Writing	4
ENGL 102HF	Honors Introduction to Literature	3
ENGL 103HF	Honors Critical Reasoning and Writing	4
ENGL 211HF	Honors British Literature to 1800	3
ENGL 212HF	Honors British Literature since 1800	3
ENGL 221HF	Honors American Literature to the Civil War	3
ENGL 222HF	Honors American Literature from the Civil War to the Present	3

ENGL 224HF	Honors World Literature through the Early Modern Period	3
ENGL 225HF	Honors World Literature since the Early Modern Period	3
ENGL 234HF	Honors Introduction to Shakespeare	3
ENGL 243HF	Honors Folklore and Mythology	3
ETHS 101HF	Honors American Ethnic Studies	3
ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	3
ETHS 235HF	Honors Contemporary Social Justice	3
GEOG 100HF	Honors Global Geography	3
GEOG 102HF	Honors Physical Geography	3
HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	3
HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	3
HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	3
HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	3
HIST 165HF	Honors Introduction to the Middle East	3
HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	3
HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	3
JOUR 110HF	Honors Mass Media Survey	3
LIB 100HF	Honors Introduction to Research	1
MATH 120HF	Honors Introductory Probability and Statistics	4
MATH 141HF	Honors College Algebra	4
MATH 151HF	Honors Calculus I (formerly MATH 150HF)	4
MATH 152HF	Honors Calculus II	4
MATH 290HF	Honors Pure Mathematics Seminar	2
MATH 291HF	Honors Applied Mathematics Seminar	2
MATH 295HF	Honors General Mathematics Seminar	2
MUS 196HF	Honors Creative Arts - Music	3
NUTR 210HF	Honors Human Nutrition	3
PHIL 100HF	Honors Introduction to Philosophy	3
PHIL 105HF	Honors World Religions	3
POSC 100HF	Honors American Government	3
POSC 110HF	Honors Contemporary American Politics	3
POSC 180HF	Honors Capital Field Trip - Sacramento Seminar	3
PSY 101HF	Honors General Psychology	3
PSY 161HF	Honors Elementary Statistics for Behavioral Science	4
PSY 202HF	Honors Research Methods in Psychology	4
PSY 251HF	Honors Social Psychology	3
SOC 101HF	Honors Introduction to Sociology	3
SOC 230HF	Honors Sociology of Gender	3
SOC 275HF	Honors Marriage and Family	3
SOC 277HF	Honors Sociology of Religion	3



SOC 285HF	Honors Drugs and Society	3
SOC 290HF	Honors Sociology of Race and Ethnicity	3
SOC 292HF	Honors Introduction to Criminology	3
SPAN 101HF	Honors Elementary Spanish I	5
SPAN 102HF	Honors Elementary Spanish II	5
THEA 196HF	Honors Creative Arts - Theatre	3
WMNS 100HF	Honors Introduction to Women's Studies	3

## Honors Courses – Equivalency

An Honors version of any Fullerton College course, designated by the letter “H” after the course number and before the letter “F” designation for Fullerton College courses, is considered equivalent to the traditional version of the course for the purpose of meeting Fullerton College prerequisite, corequisite, General Education (GE), and major requirements. Thus, an honors course may be used to meet any Fullerton College requirement satisfied by the traditional version of that course.

## Institution-Set Standards

Institution-set standards are the minimum level of performance set internally by institutions to meet educational quality and institutional effectiveness expectations. Standards reflect the “floor” or baseline levels of satisfactory performance of student learning and achievement below which the institution does not want to fall.

Institution-Set Standards include measures such as course success, course completion, persistence, transfer, degrees and certificates awarded, job earnings and placement. The Institution-Set Standards are reviewed annually so that the college community can learn about and discuss its performance to engage in continuous improvement. Reports of the Institution-Set Standards can be found at <http://ie.fullcoll.edu/institution-set-standards/>.

## Remedial Limitation

The State of California has implemented a regulation limiting the number of units students can earn for remedial/pre-collegiate basic skills courses to 30 semester units. In accordance with those guidelines, the North Orange County Community College District has established the following policy (AB 1725 Chapter 973, Statutes of 1988).

## Basic Skills Courses

Basic skills courses are defined as one or more levels below college level English and one or more levels below intermediate algebra. The North Orange County Community College District has designated certain courses as remedial/pre-collegiate basic skills courses. These courses include reading, writing, computation, learning skills, and study skills designed to ensure acquisition of those skills necessary for successful completion of associate degree, transfer and occupational courses. Fullerton College lists the following as its Basic Skills courses:

Code	Title	Units
COUN 071 F	Adaptive Computer Access	0.5-2
COUN 072 F	Learning Assessment	0.5
COUN 075 F	Adaptive Computer Access - Learning Strategies	0.5-2
ENGL 059 F	Developmental Writing	4
ENGL 060 F	Preparation for College Writing	4

ESL 025 F	Basic English Grammar for Non-Native Speakers	3
ESL 029 F	Idiomatic Expressions for Non-Native Speakers	2
ESL 035 F	Intermediate English Grammar for Non-Native Speakers	3
ESL 036 F	Basic Conversation	3
ESL 038 F	Fundamentals of American English Pronunciation for Non-Native Speakers	2
ESL 039 F	Vocabulary Expansion Techniques for Non-Native Speakers	3
ESL 045 F	Advanced English Grammar for Non-Native Speakers	3
ESL 046 F	Intermediate Conversation for Non-Native Speakers	2
ESL 047 F	Academic Preparation for Non-Native Speakers	2
ESL 048 F	Intermediate Pronunciation for Non-Native Speakers	2
ESL 049 F	Advanced Academic Vocabulary for Non-Native Speakers	3
ESL 056 F	Advanced Conversation for Non-Native Speakers	2
ESL 058 F	Advanced Pronunciation for Non-Native Speakers	2
ESL 083 F	High Intermediate Reading and Writing for Non-Native Speakers	5
MATH 004 F	Basic Mathematics I	2
MATH 006 F	Basic Mathematics II	2
MATH 007 F	Essentials of Basic Math	3
MATH 010 F	Basic Mathematics	4
MATH 015 F	Pre-Algebra	4
MATH 020 F	Elementary Algebra	4
MATH 026 F	Support for Introductory Statistics	2
MATH 030 F	Plane Geometry	4
MATH 031 F	Support for College Algebra	2
READ 027 F	Basic Study Skills	3
READ 036 F	Basic Reading	3
READ 056 F	Developmental Reading	3
READ 096 F	Preparation for College Reading	3

## Exemptions

All remedial courses taken by students enrolled in English as a Second Language courses are exempted. Students identified by the District for learning disabled programs are also exempted. When, because of closed enrollment, students are unable to enroll in the next higher level ESL course, they do not lose their exemption status. Students with documented disabilities may petition the Admissions and Records Office for exemption status on a case-by-case basis.

## Review and Release of Information

All student records of Fullerton College are maintained in accordance with the provisions of the Family Rights and Privacy Act of 1974. Copies of the complete text of this act are available in most libraries (see “Family Educational and Privacy Rights” in *Shepherd's Acts and Cases by Popular*

*Names*). The two basic elements of the Act are the student's right to review and challenge his/her record and the conditions under which information in the record can be released to outside parties.

1. Students may request access to challenge the correctness or appropriateness of any part of the record. However, students are advised that grades, though a part of the record, are considered final as assigned by the instructor and can only be challenged on the basis of clerical error, fraud, bad faith, or incompetence. Refer to Grade Change/Appeal Process (p. 56) for additional information. Students requesting to review their own records **must present proper photo identification**.
2. Student information (except for directory information) cannot be released without signed permission of the student. However, student information will be released to those legally entitled to access under this Act. Directory information may include:
  - student's name,
  - major field of study,
  - participation in officially recognized activities and sports,
  - weight and height of members of athletic teams,
  - dates of attendance,
  - degrees and awards received,
  - the most previous public or private school attended by the student, and
  - any other information authorized in writing by the student. (NOCCCD BP 5040 effective April 2009)

Additionally, under the Solomon Amendment, all branches of the United States Armed Forces may request telephone numbers and addresses of all students age 18 to 35 for recruitment purposes. **Currently enrolled students** may request the information listed above be kept confidential. A "Notice to Deny Disclosure of Personal Information" must be filed in the Admissions and Records Office within the first two weeks of the semester. In the absence of having this form on file, the college may release information to any person or agency requesting such information.
3. The law requires consent of the student or a court order before the District may release student records. When student records are subpoenaed, the student will be notified by mail to the last address on file of any such access, and the student shall have the right to request a copy of any information released in this manner.
4. Any questions regarding the student's rights under this act should be directed to the Dean of Admissions and Records.

## Study Abroad

The Study Abroad Program provides students with opportunities to enrich their educational experiences by studying abroad for a semester or a summer term, depending on the program, while receiving Fullerton College units. Faculty use the locations as the classroom to enrich the learning experience. In addition, students gain a multicultural experience by living in a society that is different from that of the United States.

Fullerton College works jointly with Cypress College of the North Orange County Community College District in offering this program.

The foreign locations and the courses offered vary from semester to semester. Over the past decade Fullerton College has offered courses in Italy, Spain, Argentina, Japan, France, England, Ireland and South Africa.

The courses offered in this program are Fullerton College courses, which meet degree and transfer requirements, either as general education

courses or elective units. Fullerton and Cypress faculty teach these courses. Students who are interested in participating in the Study Abroad program should meet with a counselor to see how the courses fit into their educational plan.

To be eligible to participate, students must:

- complete ENGL 100 F or ENGL 100 C with a grade of C or better
- successfully complete 12 units in one semester
- have at least a 2.5 GPA or higher

There is an application process for interested students beginning in the year prior to departure to the foreign location.

For further information, call (714) 732-5688 or visit the website: <http://studyabroad.fullcoll.edu>.

## Tests and Exams

Class instruction includes frequent examinations throughout the semester so that students can judge their progress. Final examinations are required in all courses as a requirement for credit in the course.

## Wait Time for Late Instructors

Instructors are to include on their course syllabi or to notify their students at the first class meeting that if, due to unforeseen emergencies, the instructor does not arrive at the scheduled start time for class, students are to remain in class for fifteen minutes (unless otherwise notified by the division). If they do not receive notification to wait for their instructor to arrive, after fifteen minutes the students may leave with no penalty for absence or assigned work due for that class meeting.

## Withdrawal Policy

For the purpose of this policy, a "W" is viewed as an indication that the student has withdrawn from a course without affecting the student's grade point average. Failure to officially withdraw by the established deadline date may result in the assignment of an "F" grade for the course.

### Instructor Initiated

Through 75% of the course, a student **may** be withdrawn if no longer participating in the course. Definitions of non-participation shall include, but are not limited to, excessive unexcused absences. Refer to the Attendance Policy (p. 11) for additional information.

### Student Initiated

**STUDENT RESPONSIBILITY** – While an instructor officially may withdraw a student who has poor attendance, it is the **student's responsibility to withdraw** if the student does not continue in attendance. All student withdrawals are to be completed ONLINE through myGateway by the established deadline date. Failure to do so may result in the student receiving a failing grade.

### Recording on Transcripts

No "W" shall be recorded on the student's transcript when withdrawing from a course according to the following guidelines:

1. **Full Term Courses:** withdrawal prior to the third week of the term.
2. **Short Term Courses** (meeting less than the full term length): withdrawal by the 20% point of the length of the course.

A "W" will be recorded on the student's transcript when withdrawing from a course according to the following guidelines:

1. **Semester Length Courses:** withdrawal during the third week through the 12th week of the term.
2. **Short Term Courses** (courses less than a semester in length): withdrawal after the 20% point through 75% point of the course.

## Excused Withdrawal

An Excused Withdrawal "EW" occurs when a student is permitted to withdraw from course(s) due to specific events beyond the control of the student and may include:

- a job transfer outside the geographical region,
- an illness in the family where the student is the primary caregiver,
- the student who is incarcerated in a California county jail or state prison and is released from custody or involuntarily transferred before the end of the term,
- the student is the subject of an immigration action, or
- other extenuating circumstances beyond the control of the student affecting his/her ability to complete a course(s).

Verifiable documentation must be presented upon petition by the student to Admissions & Records. The "EW" symbol does not count in calculation of probation or dismissal and is not counted as an enrollment attempt for purposes of course repetition.

**NOTE:** The "EW" symbol does count in the Federal financial aid Satisfactory Academic Progress Calculations.

A student should consult with the Financial Aid staff regarding any impact.

## Military Withdrawal

Students called to military service during a semester in progress should submit an Extenuating Circumstance Petition (<https://admissions.fullcoll.edu/extenuating-circumstances-petition/>) to have a "MW" (military withdrawal) noted on their academic transcript. A copy of military orders are required.

## Academic Requirements

- Advanced Placement Fullerton College Associate Degree General Education (p. 20)
- Associate Degree General Education Requirement Fullerton College (p. 28)
- Associate in Arts and Associate in Science Degrees for Transfer (p. 35)
- Catalog Rights (p. 36)
- General Education Mathematics Requirement (p. 36)
- General Education Statement of Philosophy (p. 36)
- Graduation/Commencement (p. 36)
- Graduation Requirements (p. 37)
- Multiple Associate Degrees (p. 38)
- Paralegal Studies (p. 39)
- Paralegal Studies Associate in Science Degree General Education (p. 41)

## Advanced Placement Fullerton College Associate Degree General Education

Fullerton College grants General Education (GE) credit for successful completion of the College Board Advanced Placement (AP) examinations. Students who completed AP examinations with a score of 3, 4, or 5 may receive General Education credit in the appropriate Fullerton College Associate Degree GE and major if applicable. It is the student's responsibility to petition for credit through the Admissions and Records Office. Once AP credit is posted to the student's transcript, it cannot be removed.

NOTE: The posting of AP credit for courses on the Fullerton College transcript does not ensure their transferability to four-year schools. Each college and university grants AP credit according to its own policy. In some cases, Fullerton College will grant more units of credit (in other cases, fewer units of credit) for transfer admission purposes. AP credit for the major frequently requires higher scores or may not be accepted at all. Students planning to transfer should consult the catalog(s) of the transfer institution(s) to determine how AP credit is granted for the purpose of admission, general education and the specific major prior to petitioning for credit.

AP Examination	Credit Allowed	Units	AA/AS GE
Art History	ART 112 F and ART 113 F	6	C1
Art (Studio Art: Drawing)	ART 182 F	3	C1
Art (Studio Art: 2D Design)	—	3	—
Art (Studio Art: 3D Design)	—	3	—
Biology	BIOL 101 F	5	B1
Chemistry	CHEM 107 F	5	B1
Chemistry (Score of 5)	CHEM 111AF	5	B1
Chinese Language and Culture	CHIN 101 F and CHIN 102 F	10	C2
Computer Science A		3	
Computer Science Principles <sup>7</sup>		3	
Economics – Micro	ECON 101 F	3	D1
Economics – Macro	ECON 102 F	3	D1
English Language and Composition	ENGL 100 F	4	A1
English Literature and Composition	ENGL 100 F and ENGL 102 F	7	A1 and C2
Environmental Science	—	4	B1
French Language and Culture	FREN 101 F and FREN 102 F	10	C2
German Language and Culture	GERM 101 F and GERM 102 F	10	C2
Government and Politics (U.S.)	POSC 100 F	3	D1
Government and Politics (Comparative)	POSC 215 F	3	D1
History (U.S.)	HIST 170 F and HIST 171 F	6	C2 and D1
History (European)	HIST 110 F and HIST 111 F	6	C2 and D1
History (World - Modern)	HIST 112 F and HIST 113 F	6	C2 and D1
Human Geography	—	3	D1
Italian Language and Culture	ITAL 101 F and ITAL 102 F	10	C2
Japanese Language and Culture	JAPN 101 F and JAPN 102 F	10	C2
Latin	—	3	C2
Mathematics (Calculus AB)	MATH 151 F	4	B2
Mathematics (Calculus BC)	MATH 151 F and MATH 152 F	8	B2
Mathematics (Calculus BC/AB Subscore)	MATH 151 F	4	B2
Mathematics (Statistics)	MATH 120 F	4	A2 or B2
Music Theory	—	3	C1
Physics 1	—	4	B1
Physics 2	—	4	B1
Physics (C: Mechanics) (Score of 5)	PHYS 210 F or PHYS 221 F	4	B1
Physics (C: Electricity and Magnetism) (Score of 5)	PHYS 211 F or PHYS 222 F	4	B1
Psychology	PSY 101 F	3	D2
Spanish Language and Culture	SPAN 101 F and SPAN 102 F	10	C2
Spanish Literature and Culture	SPAN 205 F and SPAN 206 F	6	C2

CLEP Examination	Credit Allowed	Units	AA/AS GE
College Composition Exam (Score of 50 or higher) <sup>1</sup>	ENGL 100 F	4	A1

<sup>1</sup> Fullerton College does not accept the College Composition-Modular exam.

<sup>7</sup> Computer Science Principles exam will meet Area B4 if taken Fall 2019 or later.

Equivalency for courses not listed above will be determined by the appropriate academic department.

## Using Advanced Placement to Satisfy CSU Eligibility and CSU GE

Transfer students may earn general education or lower division major credits by taking an AP in place of a course. The CSU faculties have determined the passing scores, minimum units of credit earned, and certification area (for General Education Breadth and/or U.S. History, Constitution, and American Ideas) of AP.

Note that each campus in the California State University system determines how it will apply external examinations toward credit in the major. For students not already certified in GE and/or American Institutions, the campus also determines how to apply credit from such exams toward the local degree requirements.

## Using Advanced Placement to Satisfy UC Eligibility and IGETC

The University of California grants credit for all College Board AP Tests on which a student scores 3, 4, or 5. Students should be aware that college courses taken may duplicate the content of AP examinations. The University may not award credit for both the course and the AP exam.

Each exam listed below may be used in lieu of one course to satisfy one UC "a-g" Freshman Subject Area, one UC Transfer Subject Area replacement or one Intersegmental General Education Transfer Curriculum (IGETC) area and the area 6A (Language other than English) proficiency level as listed. In some cases, satisfaction of requirements or credit toward specific requirements is also awarded by the campuses. Consult [www.assist.org](http://www.assist.org) (<http://www.assist.org>) or the campus regarding issues about how AP credit is granted for each major in each department. New AP exams will be reviewed as they are developed and included on the chart where appropriate.

The AP information on this page is for credit towards Fullerton College Associate Degree General Education. AP information for IGETC (p. 509) and CSU GE (p. 502) are located in the following pages.

## Advanced Placement Exams That Satisfy UC Freshmen and Transfer Admission and IGETC

(Updated July, 2021)

AP Subject Area	AP Score	UC Eligibility	Applicability (3 sem/4 qtr)	Total Quarter Units Awarded	Total Semester Units Awarded	Limitations of Credit
ART: Art History	3, 4, 5	UC-H	3A or 3B	8	5.3	
STUDIO ART: 2-D Design	3, 4, 5			8	5.3	8 Quarter/5.3 semester units max for all Studio Art exams.
3-D Design	3, 4, 5			8	5.3	8 Quarter/5.3 semester units max for all Studio Art exams.
Drawing	3, 4, 5			8	5.3	8 Quarter/5.3 semester units max for all Studio Art exams.
BIOLOGY*	3, 4, 5	UC-S	5B and 5C	8	5.3	
CHEMISTRY*	4, 5	UC-S	5A and 5C	8	5.3	
COMPUTER SCIENCE A	3, 4, 5		Before 2018	2	1.3	4 quarter/2.7 semester units max for Computer Science A and AB Exams.

COMPUTER SCIENCE A			2018 and later	8	5.3	
COMPUTER SCIENCE PRINCIPLE	3, 4, 5			8	2.7	
ECONOMICS: Macroeconomics	3, 4, 5	UC-B	4	4	2.7	
Microeconomics	3, 4, 5	UC-B	4	4	2.7	
ENGLISH: Language and Composition	3, 4, 5	UC-E	1A	8	5.3	8 quarter/5.3 semester units for both English Lang/Comp and Lit/Comp
Literature and Composition	3, 4, 5	UC-E/UC-H	1A or 3B	8	5.3	8 quarter/5.3 semester units for both English Lang/Comp and Lit/Comp
ENVIRONMENTAL SCIENCE**	3, 4, 5	UC-S	5A and 5C	4	2.7	
GOVERNMENT and POLITICS:						
Comparative U.S.	3, 4, 5	UC-B	4	4	2.7	
U.S.	3, 4, 5	UC-B	4	4	2.7	
HISTORY: European U.S.	3, 4, 5	UC-H/UC-B	3B or 4	8	5.3	
U.S.	3, 4, 5	UC-H/UC-B	3B or 4	8	5.3	
World - Modern	3, 4, 5	UC-H/UC-B	3B or 4	8	5.3	
HUMAN GEOGRAPHY	3, 4, 5	UC-B	4	4	2.7	
LANGUAGE OTHER THAN ENGLISH:						
Chinese Language and Culture	3, 4, 5	UC-H	6A and 3B	8	5.3	
French Language and Culture	3, 4, 5	UC-H	6A and 3B	8	5.3	
German Language and Culture	3, 4, 5	UC-H	6A and 3B	8	5.3	
Italian Language and Culture	3, 4, 5	UC-H	6A and 3B	8	5.3	
Japanese Language and Culture	3, 4, 5	UC-H	6A and 3 B	8	5.3	
Latin	3, 4, 5	UC-H	6A and 3B	4	2.7	
Spanish Language and Culture	3, 4, 5	UC-H	6A and 3B	8	5.3	
Spanish Literature and Culture	3, 4, 5	UC-H	6A and 3B	8	5.3	
MATH: Calculus AB	3, 4, 5	UC-M	2A	4	2.7	8 quarter/5.3 semester units max for both exams, 4 quarter/2.7 semester units max between AB and AB subscore

Calculus BC	3, 4, 5	UC-M	2A	8	5.3	8 quarter/5.3 semester units max for both exams, 4 quarter/2.7 semester units max between AB and AB subscore
AB subscore from 3,4,5 BC exam		UC-M	2A	4	2.7	8 quarter/5.3 semester units max for both exams, 4 quarter/2.7 semester units max between AB and AB subscore
MUSIC THEORY	3, 4, 5	UC-H		8	5.3	
PHYSICS: Physics 1*		UC-S	5A and 5C	8	5.3	8 quarter/5.3 semester units maximum for all physics exams. Physics 1 and Physics 2 replaced Physics B in 2014-2015.
Physics 2*	3, 4, 5	UC-S	5A and 5C	8	5.3	8 quarter/5.3 semester units maximum for all physics exams. Physics 1 and Physics 2 replaced Physics B in 2014-2015.
Physics C Mechanics**	3, 4, 5	UC-S	5A and 5C	4	2.7	8 quarter/5.3 semester units maximum for all physics exams.
Physics C Electricity and Magnetism**	3, 4, 5	UC-S	5A and 5C	4	2.7	8 quarter/5.3 semester units maximum for all physics exams.
PSYCHOLOGY	3, 4, 5	UC-B	4	4	2.7	
STATISTICS	3, 4, 5	UC-M	2A	4	2.7	

\* AP exams in Biology, Chemistry, Physics 1, Physics 2 or Physics B allow CCC campuses to apply 4 semester or 5 quarter units to IGETC certification.

\*\* AP exams in Environmental Science, Physics C: Mechanics and Physics C: Electricity and Magnetism allow CCC campuses to apply 3 semester or 4 quarter units to IGETC certification. NOTE: Students who complete these exams will be required to complete at least 4 semester or 5 quarter units to satisfy the minimum required units for Area 5. Please see Section 10.6 for more details.

## Fullerton College AA General Education CLEP List

Students may earn credit for College-Level Examination Program (CLEP) tests. CLEP credit can be used to meet Fullerton College AA General Education (GE). Students must have the College Board send CLEP results to the Admissions and Records Office for use on the AA GE pattern. Course credit and units granted at Fullerton College may differ from course credit and units granted by another college or transfer institution. Fullerton College students will not receive credit for both the CLEP exam and an AP in the same foreign language.

CLEP Examination	Passing Score	Units	FC GE Areas
American Government	50	3	D1 Social/Behavioral Sciences
American Literature	50	3	C2 Humanities
Analyzing and Interpreting Literature	50	3	C2 Humanities
Biology	50	3	B1 Physical and Life Sciences
Calculus	50	3	B2 Mathematicians
Chemistry	50	3	B1 Physical and Life Sciences
College Algebra	50	3	B2 Mathematics
College Algebra - Trigonometry	50	3	B2 Mathematics
College Mathematics	50	0	N/A
College Composition - Modular	50	0	N/A
English Composition (no essay)	50	0	N/A
English Composition with Essay	50	0	N/A
English Literature	50	3	C2 Humanities
Financial Accounting	50	3	N/A
French Level I	50	0	N/A
French Level II	59	3	C2 Humanities
German Level I	50	0	C2 Humanities
German Level II	60	3	C2 Humanities
History, United States I	50	3	D1 Social and Behavioral Sciences
History, United States II	50	3	D1 Social and Behavioral Sciences
Human Growth and Development	50	3	A2 Analytical Thinking
Humanities	50	3	C2 Humanities
Information Systems and Computer Applications	50	3	A2 Analytical Thinking
Introduction to Educational Psychology	50	0	N/A
Introductory Business Law	50	0	N/A
Introductory Psychology	50	3	D2 Individual and Group Behavior
Introductory Sociology	50	3	D2 Individual and Group Behavior
Natural Sciences	50	0	N/A
Pre-Calculus	50	3	B2 Mathematics
Principles of Accounting	50	0	N/A
Principles of Macroeconomics	50	3	D1 Social and Behavioral Sciences
Principles of Management	50	0	N/A
Principles of Marketing	50	0	N/A
Principles of Microeconomics	50	3	D1 Social and Behavioral Sciences
Spanish Level I	50	0	N/A
Spanish Level II	63	3	C2 Humanities
Western Civilization	50	3	C2 Humanities or D1 Social and Behavioral Sciences
Western Civilization II	50	3	D1 Social and Behavioral Sciences
*College Composition Exam	50	4	A1 ENGL 100 F

\*Fullerton College does not accept the College Composition-Modular exam



Fullerton College AA GE: This chart represents CLEP test scores that can be applied to clear general education areas. There is no course-to-course articulation, no course equivalency granted based on CLEP scores except for College Composition Exam.

## CSU Systemwide Credit for External Examinations

(as of March 2021)

College Board Advanced Placement (AP) Tests	Passing Score	Minimum Semester Credits Earned <sup>1</sup>	Semester Credits Toward GE Breadth Certification	American Institutions and/or GE Breadth Area <sup>2</sup>	Removal Date for GE Breadth <sup>3</sup>
Art History	3	6	3	C1 or C2	
Biology	3	6	4	B2 and B3	
Calculus AB <sup>4</sup>	3	3	3	B4	
Calculus BC <sup>4</sup>	3	6	3	B4	
Calculus BC/AB Subscore <sup>4</sup>	3	3	3	B4	
Chemistry	3	6	6	B1 and B3	F'09
Chemistry	3	6	4	B1 and B3	
Chinese Language and Culture	3	6	3	C2	
Comparative Government and Politics	3	3	3	D	
Computer Science A <sup>4</sup>	3	3	0	N/A	
Computer Science AB <sup>4</sup>	3	6	0	N/A	
Computer Science Principles	3	6	3	B4	
English Language and Composition	3	6	3	A2	
English Literature and Composition	3	6	6	A2 and C2	
Environmental Science <sup>5</sup>	3	4	4	B2 and B3	F'09
Environmental Science <sup>5</sup>	3	4	4	B1 and B3	
European History	3	6	3	C2 or D	
French Language	3	6	6	C2	F'09
French Language	3	6	3	C2	F'11
French Language and Culture	3	6	3	CS	
French Literature	3	6	3	C2	F'09
German Language	3	6	6	C2	F'09
German Language	3	6	3	C2	F'11
German Language and Culture	3	6	3	C2	
Human Geography	3	3	3	D	
Italian Language and Culture	3	6	3	C2	
Japanese Language and Culture	3	6	3	C2	
Latin Literature	3	6	3	C2	F'09
Latin	3	6	3	C2	
Latin: Vergil	3	3	3	C2	F'12
Macroeconomics	3	3	3	D	
Microeconomics	3	3	3	D	
Music Theory	3	6	3	C1	F'09
Physics B <sup>6</sup>	3	6	6	B1 and B3	F'09

Physics B <sup>6</sup>	3	6	4	B1 and B3	F'15
Physics 1 <sup>6</sup>	3	4	4	B1 and B3	
Physics 2 <sup>6</sup>	3	4	4	B1 and B3	
Physics C (electricity/ magnetism) <sup>6</sup>	3	4	4	B1 and B3	
Physics C (mechanics) <sup>6</sup>	3	4	4	B1 and B3	
Psychology	3	3	3	D	
Seminar	3	3	0	N/A	
Spanish Language	3	6	6	C2	S'14
Spanish Language and Culture	3	6	3	C2	
Spanish Literature	3	6	6	C2	S'13
Spanish Literature and Culture	3	6	3	C2	
Statistics	3	3	3	B4	
Studio Art – 2D Design	3	3	0	N/A	
Studio Art – 3D Design	3	3	0	N/A	
Studio Art – Drawing	3	3	0	N/A	
U.S. Government & Politics	3	3	3	D and US-2	
U.S. History	3	6	3	(C2 or D) and US-1	
World History - Modern	3	3	3	C2 or D	

<sup>1</sup> These units count toward eligibility for admission. The units may not apply towards Associate Degrees for Transfer (AD-T) or the Baccalaureate Degree. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1036 and 1100 REVISED for details.

<sup>2</sup> Areas of GE Breadth (A1 through E) are defined in EO 1100 REVISED. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 1061, and at assist.org (<http://www.assist.org>).

<sup>3</sup> Student seeking certification in GE Breadth prior to transfer must have passed the test before this date.

<sup>4</sup> If a student passes more than one AP exam in calculus or computer science, only one examination may be applied to the baccalaureate.

<sup>5</sup> Students who pass AP Environmental Science earn 4 units of credit. Tests prior to Fall 2009 may apply to either B1+B3 or B2+B3 of GE Breadth. Fall of 09 or later, those credits may only apply to B1+B3.

<sup>6</sup> If a student passes more than one AP exam in physics, only six units of credit may be applied to the baccalaureate, and only four units of credit may be applied to a certification in GE Breadth.

## CSU Systemwide Credit for External Examinations (as of March, 2021)

College Level Examination Program (for CSU only)	Passing Score	Minimum Semester Credits Earned <sup>1</sup>	Semester Credits Toward GE Breadth Certification	American Institutions and/or GE Breadth Area <sup>2</sup>	Removal Date for GE Breadth <sup>3</sup>
American Government	50	3	3	D	
American Literature	50	3	3	C2	
Analyzing and Interpreting Literature	50	3	3	C2	
Biology	50	3	3	B2	
Calculus	50	3	3	B4	
Chemistry	50	3	3	B1	
College Algebra	50	3	3	B4	
College Algebra – Trigonometry	50	3	3	B4	
College Composition	50	0	0	N/A	
College Composition – Modular	50	0	0	N/A	
College Mathematics	50	0	0	N/A	
English Composition (no 50 essay)	50	0	0	N/A	

English Composition with Essay	50	0	0	N/A	
English Literature	50	3	3	C2	F'11
Financial Accounting	50	3	0	N/A	
French <sup>3</sup> Level I	50	6	0	N/A	
French <sup>3</sup> Level II	59	12	3	C2	F'15
French <sup>3</sup> Level II	59	9	3	C2	
Freshman College Composition	50	0	0	N/A	
German <sup>3</sup> Level I	50	6	0	N/A	
German <sup>3</sup> Level II	60	12	3	C2	F'15
German <sup>3</sup> Level II	60	9	3	C2	
History, United States I	50	3	3	D and US-1	
History, United States II	50	3	3	D and US-1	
Human Growth and Development	50	3	3	E	
Humanities	50	3	3	C2	
Information Systems and Computer Applications	50	3	0	N/A	
Introduction to Educational Psychology	50	3	0	N/A	
Introductory Business Law	50	3	0	N/A	
Introductory Psychology	50	3	3	D	
Introductory Sociology	50	3	3	D	
Natural Sciences	50	3	3	B1 or B2	
Pre-Calculus	50	3	3	B4	
Principles of Accounting	50	3	0	N/A	
Principles of Macroeconomics	50	3	3	D	
Principles of Management	50	3	0	N/A	
Principles of Marketing	50	3	0	N/A	
Principles of Microeconomics	50	3	3	D	
Social Sciences and History	50	0	0	N/A	
Spanish <sup>3</sup> Level I	50	6	0	N/A	
Spanish <sup>3</sup> Level II	63	12	3	C2	F'15
Spanish <sup>3</sup> Level II	63	9	3	C2	
Trigonometry	50	3	3	B4	F'06
Western Civilization I	50	3	3	C2 or D	
Western Civilization II	50	3	3	D	

<sup>1</sup> These units count toward eligibility for admission. The units may not apply towards Associate Degrees for Transfer (AD-T) or the Baccalaureate Degree. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1036 and 1100 REVISED for details.

<sup>2</sup> Areas of GE Breadth (A1 through E) are defined in EO 1100 REVISED. Areas of American Institutions (US-1 through US-3) are set forth in Sections 1A and 1B of EO 1061, and at assist.org (<http://www.assist.org>).

<sup>3</sup> If a student passes more than 1 CLEP test in the same language other than English (e.g., two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of baccalaureate credit; the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Area C2 of GE Breadth, as noted.

## CSU Systemwide Credit for External Examinations (as of March, 2021)

International Baccalaureate Exam (CSU and IGETC)	Passing Score	Minimum Semester Credits Earned <sup>1</sup>	Semester Credits Toward CSU GE Breadth Certification	American Institutions and/or CSU GE Breadth Area <sup>2</sup>	IGETC Semester/Quarter Units Earned	IGETC Area (Passing score of 5, 6 or 7)	Removal Date for GE Breadth <sup>3</sup>
Biology HL	5	6	3	B2	3 sem/4 qrt	5B (without lab)	
Chemistry HL	5	6	3	B1	3 sem/4 qrt	5A (without lab)	
Economics HL	5	6	3	D	3 sem/4 qrt	4B	
Geography HL	5	6	3	D	3 sem/4 qrt	4E	
History (any region) HL	5	6	3	C2 or D	3 sem/4 qrt	3B or 4F <sup>5</sup>	
Language A1 (any 4 language) HL	4	6	3	C2	3 sem/4 qrt	3B and 6A	F'13
Language A2 (any 4 language) HL	4	6	3	C2	3 sem/4 qrt	3B and 6A	F'13
Language A Literature HL	4	6	3	C2	3 sem/4 qrt	3B	
Language A Language and Literature HL	4	6	3	C2	3 sem/4 qrt	3B	
Language B (any 4 language) HL <sup>4</sup>	4	6	0	N/A	3 sem/4 qrt	6A	
Mathematics HL	4	6	3	B4	3 sem/4 qrt	2A	
Physics HL	5	6	3	B1	3 sem/4 qrt	5A (without lab)	
Psychology HL	5	6	3	D	3 sem/4 qrt	4I	
Theater HL	4	6	3	C1	3 sem/4 qrt	3A	

<sup>1</sup> These units count toward eligibility for admission. The units may not apply towards Associate Degrees for Transfer (AD-T) or the Baccalaureate Degree. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1036 and 1100 REVISED for details.

<sup>2</sup> Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at assist.org (<http://www.assist.org>).

<sup>3</sup> Students seeking certification in GE Breadth prior to transfer must have passed the test before this date.

<sup>4</sup> The IB Curriculum offers language at various levels for the native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.

<sup>5</sup> IB exam may be used in either area of IGETC regardless of where the certifying CCC's discipline is located.

## Associate Degree General Education Requirement Fullerton College

### 2021-2022

Twenty-four (24) units total minimum requirement - Three (3) units in each of the following eight (8) sub-categories.

NOTE: This list does not meet the requirements for UC or CSU transfer.

### Area A: Language and Rationality (6 units)

Code	Title	Units
<b>A1 - Written Communication - must be completed with a grade of C or better (3 units)</b>		
BUS 111 F	Business Communications	3
ENGL 100 F	College Writing	4
	or ENGL 100HF Honors College Writing	

ENGL 101 F	Enhanced College Writing	5
ENGL 110 F	Enhanced College Writing for Non-Native Speakers (beg F'20)	5
JOUR 101 F	Reporting and Writing	3
<b>A2 - Analytical Thinking (3 units)</b>		
BUS 112 F	Public Speaking for Business	4
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business) (beg F'17)	3
	or BUS 211HF Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
COMM 100 F	Public Speaking	3
COMM 120 F	Intercultural Communication	3
COMM 124 F	Small Group Communication	3
COMM 135 F	Essentials of Argumentation	3
CIS 111 F	Introduction to Information Systems (beg F'17)	4
	or CIS 111HF Honors Introduction to Information Systems	

CRTV 118 F	Introduction to Radio, TV and Film	3
CSCI 123 F	Introduction to Programming Concepts in C++	4
ENGL 103 F	Critical Reasoning and Writing	4
or ENGL 103HF	Honors Critical Reasoning and Writing	
ENGL 104 F	Critical Thinking and Writing About Literature	4
ENGL 201 F	Intermediate College Writing	3
JOUR 110 F	Mass Media Survey	3
or JOUR 110HF	Honors Mass Media Survey	
MATH 120 F	Introductory Probability and Statistics <sup>1</sup>	4
or MATH 120HF	Honors Introductory Probability and Statistics	
PHIL 170 F	Logic and Critical Thinking	3
PHIL 172 F	Critical Thinking and Writing	3
PSY 161 F	Elementary Statistics for Behavioral Science <sup>1</sup>	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
READ 142 F	College Reading: Logical Analysis and Evaluation	3
SOSC 120 F	Introduction to Probability and Statistics <sup>1</sup>	4
SOSC 125 F	Introduction to Research Methods	3

<sup>1</sup> Course can be used only in one area (Area A to D).

<sup>2</sup> New course for 2021-2022

## Area B: Natural Sciences and Mathematics (6 units)

Code	Title	Units
<b>B1 - Physical Sciences and Life Sciences (3 units)</b>		
<b>Physical Sciences:</b>		
CHEM 100 F	Chemistry for Daily Life	4
CHEM 101 F	Chemistry for Allied Health Science	5
CHEM 103 F	Chemistry in a Changing World	3
CHEM 107 F	Preparation for General Chemistry	5
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
ESC 100 F	Physical Geology	3
ESC 101 F	Earth Science Survey	3
ESC 102 F	Survey of Natural Disasters	3
ESC 103 F	Historical Geology	4
ESC 104 F	Geology of National Parks and Monuments	3
ESC 105 F	Introduction to Weather and Climate	3
ESC 106 F	Geology of Orange County Area	2
ESC 107 F	Earth Science for Educators	4
ESC 110 F	Introduction to Climate Science	3
ESC 116 F	Astronomy	3
or ESC 116HF	Honors Astronomy	
ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 190 F	Environmental Geology	3
GEOG 102 F	Physical Geography	3

or GEOG 102HF	Honors Physical Geography	
PHYS 120 F	Relativity for Poets	3
PHYS 130 F	Elementary Physics	4
PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II	4
PHYS 210 F	Physics with Calculus for the Life Sciences I	4
PHYS 211 F	Physics with Calculus for the Life Sciences II	4
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
TECH 088 F	Technical Science	3
<b>Life Sciences:</b>		
ANAT 231 F	General Human Anatomy (beg F'12)	4
ANAT 240 F	Human Physiology	5
ANTH 101 F	Physical Anthropology	3
or ANTH 101HF	Honors Physical Anthropology	
BIOL 100 F	Principles of Biology (beg F'11)	4
BIOL 101 F	General Biology	5
or BIOL 101HF	Honors General Biology	
BIOL 102 F	Human Biology	3
BIOL 104 F	Biology of Insects and Spiders	3
BIOL 108 F	Plants and People (beg F'11)	3
BIOL 109 F	Genetics and Biotechnology in Society	3
BIOL 141 F	Marine Mammal Biology and Conservation	3
BIOL 170 F	Organismal Biology	5
BIOL 190 F	Introduction to Biotechnology	3
BIOL 222 F	Marine Biology	3
BIOL 266 F	General Zoology (beg F'11)	5
BIOL 268 F	General Botany (beg F'11)	5
BIOL 272 F	Cell and Molecular Biology (beg F'11)	4
BIOL 274 F	General Ecology	4
ENVS 105 F	Environmental Biology	3
HED 140 F	Health Science	3
HORT 152 F	Applied Botany	4
HORT 205 F	Applied Entomology	3
HORT 207 F	Plant Pathology	3
MICR 220 F	Medical Microbiology	4
MICR 262 F	General Microbiology	5
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
<b>B2 - Mathematics - must be completed with a grade of C or better (3 units)</b>		
<i>Math Proficiency Exam (no longer offered, see catalog and/or counselor for information)</i>		
BUS 101 F	Personal Financial Management (beg F'20)	3
BUS 151 F	Business Mathematics	3
MATH 040 F	Intermediate Algebra (or higher within the Math Division)	4
MATH 041 F	Combined Elementary and Intermediate Algebra	6

MATH 043 F	Intermediate Algebra for Statistics and Liberal Arts	4
<i>(or higher within the Math Division)</i>		
PSY 161 F	Elementary Statistics for Behavioral Science <sup>1</sup>	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
SOSC 120 F	Introduction to Probability and Statistics <sup>1</sup>	4

<sup>1</sup> Course can be used only in one area (Area A to D).

**CHOOSE A COURSE (3 units) FROM 4 OF 5 AREAS (AREA C1, C2, D1, D2, or E) (12 units total)**

## Area C: Arts and Humanities

Code	Title	Units
<b>C1 - Visual Arts, Music, Theatre and Dance (3 units)</b>		
ART 100 F	Fundamentals of Art	3
ART 110 F	Introduction to Art	3
ART 112 F	Art History - Ancient to Medieval	3
ART 113 F	Art History - Renaissance to Modern	3
or ART 113HF	Honors Art History - Renaissance to Modern	
ART 114 F	Art History - Impressionism to Present	3
ART 115 F	The Museum Experience (formerly Museum Survey)	3
ART 116 F	Art History - The Art of Mexico	3
ART 117 F	Art History - American Art (beg F'13)	3
ART 118 F	Color Theory	3
ART 120 F	Basic Design	3
ART 121 F	Three-Dimensional Design	3
ART 153 F	Ceramics - Beginning Handbuilding (formerly ART 150AF)	3
ART 154 F	Ceramics - Beginning Throwing	3
ART 160 F	Fundamentals of Sculpture	3
ART 174 F	Beginning Jewelry Fabrication	3
ART 179 F	Drawing for Non-Art Majors	2
ART 182 F	Basic Drawing	3
ART 184 F	Expressive Drawing	3
ART 185 F	Life Sculpture	3
ART 186 F	Beginning Life Drawing	3
ART 187 F	Watercolor for Non-Art Majors	2
ART 188 F	Beginning Watercolor Painting	3
ART 189 F	Beginning Painting	3
ART 196HF	Honors Creative Arts - Art	3
ART 210 F	Life Painting	3
ART 211 F	Women in the Arts	3
ART 212 F	Art History - The Art of Asia	3
ART 213 F	Art History: Pre-Columbian Art	3
ART 293 F	Painting: Narrative	3
CRTV 120 F	Media Aesthetics	3
CRTV 121 F	American Cinema to the 1960s	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema 1946 to Present	3
CRTV 131 F	Contemporary American Cinema (formerly Contemporary Cinema)	3

DANC 100 F	Dance Appreciation	3
DANC 120 F	Dance History	3
DANC 200 F	Dance Appreciation - A Classical Ballet Retrospective	3
DANC 210 F	Multicultural Dance in the U.S. Today	3
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
FASH 244 F	Ethnic Costume	3
IDES 180 F	History of Architecture and Furnishings I (formerly History of Architecture I)	3
MUS 101 F	Music Fundamentals	3
MUS 103 F	Beginning Musicianship	1
MUS 104 F	Intermediate Musicianship	1
MUS 106 F	Introduction to College Music Theory	3
MUS 107 F	Music Theory I (formerly Harmony)	3
MUS 110 F	Electronic Music I: Beginning Music Production	3
MUS 113 F	Jazz History - An Appreciation	3
MUS 116 F	Music Appreciation	3
MUS 118 F	Introduction to Opera	3
MUS 119 F	History of Rock Music	3
MUS 120 F	Survey of Music History	3
MUS 180 F	Collegiate Chorale	1
MUS 196HF	Honors Creative Arts - Music	3
MUS 271 F	Fullerton College Symphony	1
MUS 273 F	Concert Band	1
MUS 274 F	Fullerton College Symphonic Winds	1
MUS 281 F	Concert Choir	1
MUS 282 F	Fullerton College Master Chorale	1
MUSA 104 F	Introduction to Concert Hour	1
MUSA 130 F	Introduction to Piano for Non-Music Majors	1
PHOT 101 F	Introduction to Photography	3
PHOT 111 F	Introduction to Photography from Analog to Digital (beg F'09)	3
THEA 100 F	Introduction to the Theatre	3
THEA 104 F	Introduction to Theatre Appreciation	3
THEA 105 F	Musical Theatre History (beg F'12)	3
THEA 106 F	Beginning Principles of Playwriting	3
THEA 109 F	Modern Dramatic Literature	3
THEA 127 F	Oral Interpretation	3
THEA 160 F	Introduction to Sound Technology	3
THEA 161 F	Sound Reinforcement Techniques	2
THEA 162 F	Sound Design for the Theatre	2
THEA 196HF	Honors Creative Arts - Theatre	3
<b>C2 - Literature, Philosophy, Religion and Foreign Language</b>		
CDES 242 F	Introduction to Liberal Studies (beg F'13)	3
ENGL 102 F	Introduction to Literature	3
or ENGL 102HF	Honors Introduction to Literature	
ENGL 105 F	Introduction to Creative Writing	3
ENGL 203 F	Introduction to Dramatic Literature	3
ENGL 204 F	Introduction to Poetry	3
ENGL 207 F	The Short Story	3

ENGL 208 F	Introduction to Film Studies	3	or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	3
ENGL 209 F	Intermediate Creative Writing (beg F'19)	3	HIST 154 F	Ancient Egypt <sup>1</sup>	3
ENGL 210 F	Introduction to Language Structure and Use	3	HIST 170 F	History of the United States to 1877 (formerly History of the United States I) (beg F'16) <sup>1</sup>	3
ENGL 211 F	British Literature to 1800	3	or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	3
or ENGL 211HF	Honors British Literature to 1800		HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) (beg F'16) <sup>1</sup>	3
ENGL 212 F	British Literature since 1800	3	or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	3
or ENGL 212HF	Honors British Literature since 1800		HIST 270 F	Women in United States History (beg Spr'06) <sup>1</sup>	3
ENGL 221 F	American Literature to the Civil War	3	PHIL 100 F	Introduction to Philosophy	3
or ENGL 221HF	Honors American Literature to the Civil War		or PHIL 100HF	Honors Introduction to Philosophy	3
ENGL 222 F	American Literature from the Civil War to the Present	3	PHIL 101 F	Introduction to Religious Studies	3
or ENGL 222HF	Honors American Literature from the Civil War to the Present		PHIL 105 F	World Religions	3
ENGL 224 F	World Literature through the Early Modern Period	3	or PHIL 105HF	Honors World Religions	3
or ENGL 224HF	Honors World Literature through the Early Modern Period		PHIL 135 F	Social and Political Philosophy	3
ENGL 225 F	World Literature since the Early Modern Period	3	PHIL 160 F	Introduction to Ethics	3
or ENGL 225HF	Honors World Literature since the Early Modern Period		PHIL 195 F	Women's Issues in Philosophy	3
ENGL 234 F	Introduction to Shakespeare	3	PHIL 200 F	Introduction to Christianity (beg F'11)	3
or ENGL 234HF	Honors Introduction to Shakespeare		PHIL 201 F	History of Philosophy - Ancient and Medieval (beg F'11)	3
ENGL 239 F	Survey of Children's Literature	3	PHIL 202 F	History of Philosophy - Modern and Contemporary (beg F'11)	3
ENGL 240 F	Survey of Young Adult Literature	3	PHIL 210 F	Introduction to Judaism (beg F'11)	3
ENGL 243 F	Folklore and Mythology	3	PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3
or ENGL 243HF	Honors Folklore and Mythology		PHIL 225 F	The American Religious Experience (beg F'17)	3
ENGL 245 F	The Bible as Literature	3	PHIL 250 F	The Religion of Islam (beg F'11)	3
ENGL 246 F	The Novel	3	PHIL 270 F	Introduction to Asian Religions (beg F'11)	3
ENGL 248 F	Science Fiction	3	<i>Foreign Language:</i>		
ENGL 249 F	Survey of Chicano/a Literature	3	CHIN 101 F	Elementary Chinese - Mandarin I	5
ENGL 251 F	Survey of Native American Literature	3	CHIN 102 F	Elementary Chinese - Mandarin II	5
ENGL 254 F	Intermediate Creative Writing: Poetry (beg F'10)	3	CHIN 203 F	Intermediate Chinese - Mandarin III	4
ENGL 255 F	Intermediate Creative Writing: Fiction	3	CHIN 204 F	Intermediate Chinese - Mandarin IV	4
ETHS 130 F	African-American History I (beg F'02) <sup>1</sup>	3	FREN 101 F	Elementary French I	5
ETHS 160 F	American Indian History (formerly History of the Native Americans) (beg F'21) <sup>1,2</sup>	3	FREN 102 F	Elementary French II	5
ETHS 171 F	Asian Pacific Islander American History (beg F'20) <sup>1,2</sup>	3	FREN 203 F	Intermediate French III	4
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I) (beg F'15) <sup>1</sup>	3	FREN 204 F	Intermediate French IV	4
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)		GERM 101 F	Elementary German I	5
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II) (beg F'15) <sup>1</sup>	3	GERM 102 F	Elementary German II	5
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)		GERM 203 F	Intermediate German III	4
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) (beg F'02) <sup>1</sup>	3	GERM 204 F	Intermediate German IV	4
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)		ITAL 101 F	Elementary Italian I	5
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) (beg F'02) <sup>1</sup>	3	ITAL 102 F	Elementary Italian II	5
			ITAL 203 F	Intermediate Italian III	4
			ITAL 204 F	Intermediate Italian IV	4
			JAPN 101 F	Elementary Japanese I	5
			JAPN 102 F	Elementary Japanese II	5
			JAPN 203 F	Intermediate Japanese III	4

JAPN 204 F	Intermediate Japanese IV	4
PORT 101 F	Elementary Portuguese I	5
PORT 102 F	Elementary Portuguese II	5
SPAN 101 F	Elementary Spanish I	5
or SPAN 101HF	Honors Elementary Spanish I	
SPAN 102 F	Elementary Spanish II	5
or SPAN 102HF	Honors Elementary Spanish II	
SPAN 201 F	Spanish for the Spanish Speaker	5
SPAN 203 F	Intermediate Spanish III	4
SPAN 204 F	Intermediate Spanish IV	4
SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3
SPAN 207 F	Children's Literature/Spanish	3

<sup>1</sup> Course can be used only in one area (Area A to D).

<sup>2</sup> New course for 2021-2022

## Area D: Social and Behavioral Sciences

Code	Title	Units
<b>D1 - Social, Political and Economic Institutions</b>		
ACCT 205 F	Ethics in Accounting	3
ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	3
or ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	
ANTH 209 F	Cultures of Latin America	3
ANTH 211 F	Celtic Cultures	3
ANTH 215 F	Global Issues in Anthropological Perspective <sup>2</sup>	3
BUS 100 F	Introduction to Business (beg F'14)	3
BUS 131 F	Principles of International Business	3
BUS 162 F	Business Economics	3
BUS 240 F	Legal Environment of Business (beg F'12)	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 242 F	International Business Law	3
BUS 245 F	Business Law I (formerly BUS 241AF)	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
ECON 102 F	Principles of Economics - Macro	3
or ECON 102HF	Honors Principles of Economics-Macro	
ETHS 101 F	American Ethnic Studies	3
or ETHS 101HF	Honors American Ethnic Studies	
ETHS 111 F	Women of Color in the U.S. <sup>2</sup>	3
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F	African-American History I (beg F'11) <sup>1</sup>	3
ETHS 131 F	African-American History II	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3

or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) <sup>1</sup>	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History <sup>1</sup>	3
ETHS 202 F	Race, Ethnicity and Pop Culture <sup>2</sup>	3
ETHS 235 F	Contemporary Social Justice Movements	3
or ETHS 235HF	Honors Contemporary Social Justice	
GEOG 100 F	Global Geography	3
or GEOG 100HF	Honors Global Geography	
GEOG 120 F	Global Environmental Problems	3
GEOG 130 F	California Geography	3
GEOG 262 F	Economic Geography	3
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I) <sup>1</sup>	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II) <sup>1</sup>	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) <sup>1</sup>	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) <sup>1</sup>	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	
HIST 127 F	Survey of United States History (formerly Survey of American History)	3
HIST 151 F	Survey of British History I (beg F'11)	3
HIST 152 F	Survey of British History II (beg F'11)	3
HIST 154 F	Ancient Egypt <sup>1</sup>	3
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3
HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3
HIST 165 F	Introduction to the Middle East (beg F'11)	3
or HIST 165HF	Honors Introduction to the Middle East	
HIST 170 F	History of the United States to 1877 (formerly History of the United States I) <sup>1</sup>	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) <sup>1</sup>	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3
HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
HIST 270 F	Women in United States History <sup>1</sup>	3
HIST 273 F	United States Environmental History <sup>2</sup>	3



HIST 275 F	History of California (beg F'11)	3
MKT 100 F	Introduction to Marketing (beg F'14)	3
POSC 100 F	American Government	3
or POSC 100HF	Honors American Government	
POSC 110 F	Contemporary American Politics (beg F'11)	3
or POSC 110HF	Honors Contemporary American Politics	
POSC 120 F	Introduction to Political Theory	3
POSC 150 F	California Government and Politics	3
POSC 200 F	Introduction to the Study of Politics	3
POSC 215 F	Comparative Politics (beg F'07)	3
POSC 216 F	Government and Politics of the Middle East	3
POSC 220 F	Introduction to Public Administration	3
POSC 230 F	Introduction to International Relations (beg F'07)	3
POSC 250 F	Gender and Politics <sup>2</sup>	3
POSC 275 F	Introduction to Public Law (beg F'11)	3
SOC 102 F	Social Problems	3
SOC 201 F	Dying and Death	3
SOC 230 F	Sociology of Gender	3
or SOC 230HF	Honors Sociology of Gender	
SOC 277 F	Sociology of Religion	3
or SOC 277HF	Honors Sociology of Religion	
SOC 280 F	Media, Culture and Society	3
SOC 285 F	Drugs and Society	3
or SOC 285HF	Honors Drugs and Society	
SOC 290 F	Sociology of Race and Ethnicity	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	
SOC 292 F	Introduction to Criminology	3
or SOC 292HF	Honors Introduction to Criminology	
<b>D2 - Theory and Research in Individual and Group Behavior</b>		
ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF	Honors Cultural Anthropology	
ANTH 103 F	Introduction to Archaeology (beg F'11)	3
or ANTH 103HF	Honors Introduction to Archaeology	
ANTH 105 F	Language and Culture	3
BUS 181 F	The Entrepreneurial Mindset (formerly Business Plan Development) (beg F'17)	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
CDES 120 F	Child Development	3
CDES 140 F	Infant and Toddler Development and Observation	3
CDES 201 F	Child in the Home and Community	3
COMM 105 F	Interpersonal Communication (beg F'20)	3
COUN 151 F	Career and College Success (formerly Career/Life Planning) <sup>1</sup>	3
COUN 152 F	Diversity in the World of Work <sup>1</sup>	3
COUN 163 F	Personal Growth and Life Success <sup>1</sup>	3
GEOG 160 F	Cultural Geography	3
PE 250 F	Sports and Society	3
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
PSY 110 F	Introduction to Applied Psychology	3

PSY 120 F	Human Sexuality	3
PSY 131 F	Cross Cultural Psychology	3
PSY 139 F	Developmental Psychology - Life Cycle	3
PSY 145 F	Child Psychology (beg F'11)	3
PSY 202 F	Research Methods in Psychology (beg F'11)	4
or PSY 202HF	Honors Research Methods in Psychology	
PSY 221 F	The Brain and Behavior	3
PSY 222 F	Abnormal Psychology (beg F'11)	3
PSY 233 F	The Psychology of Adjustment (beg F'12)	3
PSY 251 F	Social Psychology (beg F'11)	3
or PSY 251HF	Honors Social Psychology	
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
SOC 250 F	Sociology of Aging	3
SOC 275 F	Marriage and Family	3
or SOC 275HF	Honors Marriage and Family	
SOSC 130 F	Introduction to LGBTQ Studies	3
WMNS 100 F	Introduction to Women's Studies	3
or WMNS 100HF	Honors Introduction to Women's Studies	

<sup>1</sup> Course can be used only in one area (Area A to D).

<sup>2</sup> New course for 2021-2022

## Area E: Lifelong Learning and Self-Development

Code	Title	Units
BUS 108 F	Living in an Online World <sup>2</sup>	3
BUS 185 F	Creativity Matters! (beg F'20)	3
BUS 201 F	Financial Investments (beg F'20)	3
CIS 100 F	Introduction to Personal Computers (beg F'20)	4
or CIS 100HF	Honors Introduction to Personal Computers	
COUN 135 F	Introduction to Leadership Development (beg F'20)	3
COUN 151 F	Career and College Success (formerly Career/Life Planning) (beg F'20) <sup>1</sup>	3
COUN 152 F	Diversity in the World of Work (beg F'20) <sup>1</sup>	3
COUN 163 F	Personal Growth and Life Success (beg F'20) <sup>1</sup>	3
NUTR 220 F	Sports Nutrition <sup>2</sup>	3
MIND 101 F	The Practice of Mindfulness and Self-Compassion	3
PE 243 F	Stress Management (beg F'20)	3
PE 244 F	Techniques and Principles of Coaching (beg F'20)	3
PE 247 F	Sports Management (beg F'20)	3
PE 248 F	Psychology of Sport (beg F'20)	3
PE 266 F	Fitness for Living (formerly Physical Fitness as a Lifelong Concept) (beg F'20)	3
WELL 230 F	The Body-Mind Connection (beg F'20)	3

<sup>1</sup> Course can be used only in one area (Area A to D)

<sup>2</sup> Course new for 2021-2022

## Graduation Requirements for Associate Degree

1. Completion of 18 or more units of specified course work in a major with a C or better (see catalog for major course requirements).
2. Completion of 24 units of general education as shown above **OR** 39 units as stipulated by the CSU General Education Certification requirements (CSU GE Area A1, A2, A3 and B4 must have a grade of C or better) **OR** 37-39 units as stipulated by the IGETC requirements; general education patterns require meeting the unit minimum in each area. Courses appearing in more than one area may only be counted in one area.
3. Completion of **one unit of physical education or dance activity** class; or AJ 135 F or PE 243 F or PE 266 F or WELL 242 F.
4. Completion of the **Multicultural Education Requirement**.
5. Completion of **Reading Requirement**.
6. Completion of additional units will be necessary in order to meet the total of at least 60 degree applicable units required for graduation. An overall grade point average of 2.0 (or better) is required.
7. Completion of last 12 degree applicable units or minimum of 24 degree applicable units total must be taken at Fullerton College.

## Multicultural Education Requirement

**Code Title Units**  
Beginning Fall Semester 1996, to meet this requirement, every student must complete one course from the following:

Code	Title	Units
AJ 278 F	Multicultural Issues within Administration of Justice	3
ANTH 102 F	Cultural Anthropology (beg F 06)	3
or ANTH 102HF	Honors Cultural Anthropology	
ANTH 105 F	Language and Culture (beg F 99)	3
ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	3
or ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	
ANTH 209 F	Cultures of Latin America (beg '21)	3
ANTH 215 F	Global Issues in Anthropological Perspective	3
BUS 131 F	Principles of International Business (beg F 98)	3
BUS 242 F	International Business Law	3
CDES 210 F	Anti-Bias Perspective and Diversity Seminar (beg F'14)	3
CRTV 126AF	World Cinema to 1945 (beg F'00)	3
CRTV 126BF	World Cinema 1946 to Present (beg F'00)	3
COMM 120 F	Intercultural Communication	3
COUN 152 F	Diversity in the World of Work	3
DANC 210 F	Multicultural Dance in the U.S. Today (beg F'03)	3
ENGL 239 F	Survey of Children's Literature (beg F'97)	3
ENGL 240 F	Survey of Young Adult Literature	3
ENGL 249 F	Survey of Chicano/a Literature (beg F '10)	3
ETHS 101 F	American Ethnic Studies	3
or ETHS 101HF	Honors American Ethnic Studies	
ETHS 111 F	Women of Color in the U.S.	3
ETHS 129 F	Introduction to African-American Studies (beg F'19)	3

ETHS 130 F	African-American History I (beg F'19)	3
ETHS 131 F	African-American History II (beg F'19)	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	
ETHS 159 F	Introduction to American Indian Studies (beg F'20)	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies (beg F'20)	3
ETHS 171 F	Asian Pacific Islander American History (beg F'20)	3
ETHS 202 F	Race, Ethnicity and Pop Culture	3
ETHS 235 F	Contemporary Social Justice Movements	3
or ETHS 235HF	Honors Contemporary Social Justice	
FASH 244 F	Ethnic Costume	3
FOOD 130 F	Cultural Aspects of Food	3
GEOG 100 F	Global Geography	3
or GEOG 100HF	Honors Global Geography	
GEOG 160 F	Cultural Geography	3
GEOG 170 F		3
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I) (beg F'00)	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II) (beg F'00)	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) (beg F'99)	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) (beg F'99)	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	
HIST 154 F	Ancient Egypt (beg F 11)	3
HIST 165 F	Introduction to the Middle East (beg F'12)	3
or HIST 165HF	Honors Introduction to the Middle East	
HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
HIST 270 F	Women in United States History (beg F'02)	3
JOUR 271 F	Introduction to Spanish-Language Reporting (beg F'15)	3
MKT 205 F	Understanding Multicultural Markets in U.S. (beg F'03)	3
PE 250 F	Sports and Society (beg F'99)	3
PHIL 105 F	World Religions (beg F'98)	3

or PHIL 105HF	Honors World Religions	
PHIL 200 F	Introduction to Christianity (beg '21)	3
PHIL 225 F	The American Religious Experience (beg F'19)	3
PHIL 270 F	Introduction to Asian Religions (beg F'98)	3
PLEG 227 F	International Law	3
POSC 200 F	Introduction to the Study of Politics (beg F'11)	3
POSC 250 F	Gender and Politics	3
PSY 131 F	Cross Cultural Psychology (beg F'03)	3
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
SOC 102 F	Social Problems (beg F'99)	3
SOC 230 F	Sociology of Gender (beg F'20)	3
or SOC 230HF	Honors Sociology of Gender	
SOC 275 F	Marriage and Family (beg F'10)	3
or SOC 275HF	Honors Marriage and Family	
SOC 277 F	Sociology of Religion	3
or SOC 277HF	Honors Sociology of Religion	
SOC 280 F	Media, Culture and Society (beg F'20)	3
SOC 290 F	Sociology of Race and Ethnicity (beg F'14)	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	
SOSC 130 F	Introduction to LGBTQ Studies	3
SPAN 206 F	Introduction to Latin American Literature (beg F'03)	3
THEA 108 F	Multicultural Perspectives in American Theatre (beg F'03)	3
WMNS 100 F	Introduction to Women's Studies (beg F'20)	3
or WMNS 100HF	Honors Introduction to Women's Studies	

A student may use the Multicultural Education course listed above to also meet a major or general education requirement for the Associate degree.

## Graduation Reading Requirement

Proficiency in reading may be satisfied by **one of the following**:

1. Completion of a degree (AA/AS or higher) from a regionally-accredited college or university confirmed by submission of an official transcript from a regionally-accredited college or university.
2. A Fullerton College placement test score indicating a placement into READ 142 F if taken prior to 11/16/2018, or a reading proficiency test approved by the Fullerton College Reading Department.
3. A grade of C or better in READ 096 F (formerly READ 056BF), READ 101 F, READ 142 F, ESL 185 F or ESL 189 F; or an equivalent course with a grade of C- or better confirmed by submission of official transcripts from a regionally-accredited college or university.
4. A passing grade of C or better in any course in the IGETC (1B); or CSUGE (A3) Critical Thinking category; or an equivalent course with a grade of C- or better confirmed by submission of official transcripts from a regionally-accredited college or university.
5. A passing grade of C or better in the Fullerton College AA/AS degree General Education pattern Area A2 (Analytical Thinking), or an equivalent course with a grade of C- or better confirmed by submission of official transcripts from a regionally-accredited college or university.

**"Equivalent Disclaimer" - Courses taken at another college must be equivalent to courses offered at Fullerton College.**

## Associate in Arts and Associate in Science Degrees for Transfer

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer," a newly established variation of the associate degrees traditionally offered at a California community college. **The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) degrees are intended for students who plan to complete a bachelors degree in a similar major at a CSU campus.** Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major.

**In order to earn one of these degrees, students must complete:**

1. a minimum of 60 semester units of CSU-transferable coursework
2. a minimum GPA of 2.0

This 60 units includes completion of:

1. the CSU GE (p. 502) or IGETC (p. 509) pattern (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T), and
2. 18 or more units in an AA-T or AS-T major with a grade of C or better (major requirements for each AA-T and AS-T degree provided in this catalog alphabetically by discipline).
3. 12 units in residence

**There are no additional graduation requirements for AA-T or AS-T degrees.**

Students transferring to a CSU campus that does accept the specific AA-T or AS-T earned as preparation for a similar major will be granted priority admission, and will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major, see specific degree requirements for more information where this applies).

These degrees may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Students pursuing an ADT in Chemistry or Biology, must complete CSU GE for STEM or IGETC for STEM as specified:

**CSU GE Breadth for STEM for students earning an AS-T in Biology or Chemistry only**

Complete the following CSU GE courses before transfer:

- All courses in Areas A, B, and E; and
- One course in Area C1 Arts and one course in Area C2 Humanities; and

- Two courses in Area D from two different disciplines. Complete the following courses after transfer:
  - One remaining lower-division GE course in Area C\*; and
  - One remaining lower-division GE course in Area D

\*These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer.

\*\*CSU GE Breadth for STEM completion does not qualify students for the CSU GE Certificate of Achievement.

#### IGETC for STEAM for students earning an AS-T in Biology or Chemistry only

Complete the following IGETC courses before transfer:

- All courses in Areas 1 (except 1C for UC-bound students), 2, and 5; and
- One course in Area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines
- Complete the following after transfer:
  - One remaining lower-division GE course in Area 3\*;
  - One remaining lower-division GE course in Area 4\*; and
  - One course in Area 6 for UC-bound students who have not satisfied it through proficiency\*

\*These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer

\*\*IGETC for STEM completion does not qualify students for the IGETC Certificate of Achievement.

## Catalog Rights

The requirements for degrees may change during the time a student attends Fullerton College.

Catalog rights are established when a student first takes classes at Fullerton College, and they are maintained through continual enrollment at the college. These rights protect students from being held responsible for changes made to their academic programs in the years that follow their initial enrollment.

Students maintain catalog rights by maintaining **continuous** enrollment at Fullerton College — that is, by receiving a grade of “A,” “B,” “C,” “D,” “F,” “CR,” “P,” “NC,” “NP,” “RD,” “W,” or “I” on their transcripts for at least one course per academic year. Documented military or medical leave during the academic year will not be considered an interruption of enrollment. This policy supersedes all previous catalog rights provisions and applies only to programs at Fullerton College.

## General Education Mathematics Requirement

Students may fulfill the mathematics general education requirement for an Associate Degree at Fullerton College in any of the following ways:

1. successfully completing a course in area B2 on the Fullerton College General Education Pattern (p. 28) with a grade of C or better
2. successfully completing an equivalent course from a regionally accredited college or university with a grade of C or better

## General Education Statement of Philosophy

General Education Requirements at Fullerton College are designed to introduce students to the variety of means through which people comprehend the modern world. They reflect the conviction of this College that those who receive their degrees must possess in common certain basic principles, concepts, and methodologies both unique to and shared by the various disciplines. College-educated persons should be able to use this knowledge when evaluating and appreciating the physical environment, the culture, and the society in which they live. Most importantly, these requirements should lead to better self-understanding and active involvement in examining values inherent in proposed solutions to major social problems.

The subject matter presented in General Education courses at Fullerton College is designed to be general, broad, and frequently introductory rather than specialized, narrow, or advanced. These General Education courses form a pattern of learning experiences designed to provide educational opportunities that:

1. Offer instruction and training in the scientific method of problem solving while gaining knowledge in the biological, physical, and environmental sciences.
2. Provide an atmosphere for the understanding of self and the desire to pursue self-development through the use of the social, political, economic, historical, and behavioral components of human interaction.
3. Foster an appreciation of the cultural heritage as illustrated in language, literature, philosophy, and fine arts.
4. Develop reading, writing, speaking, listening, analytical thinking, mathematics, and computational and technical skills necessary for the acquisition and use of knowledge.

## Graduation and Commencement

To earn an Associate Degree and to participate in the current year's commencement ceremony, students must apply for graduation by the deadline posted in the current class schedule. Applications for graduation are available online or available online at: <https://admissions.fullcoll.edu/downloadable-forms/>.

If a student has taken courses at other colleges, official transcripts must be on file in the Admissions and Records Office by the graduation application deadline.

A maximum of 9 upper division units can be counted as elective units. Units will not be counted toward the major or general education. Grades from upper division courses will not be used when calculating the GPA.

Commencement exercises are held each year at the end of the Spring term. Detailed information about the ceremony will be sent to all graduation candidates in early May by Student Activities. Diplomas are mailed approximately three months after graduation.

# Graduation Requirements

The Associate in Arts or the Associate in Science degree may be granted upon the completion of 60 degree applicable units of work and fulfillment of the following specific requirements:

## 1. Scholarship Requirement

A cumulative grade-point average of 2.00 ("C") in all coursework attempted.

## 2. Residence Requirement

- A minimum of 24 units accumulated during two or more semesters must be completed at Fullerton College; or
- The last 12 units prior to awarding the degree must be completed at Fullerton College.

## 3. Major Requirement

- A student must achieve a grade of C or better in each course attempted that is counted for the major or area of emphasis.

## 4. General Education Requirements

- 24 units as stipulated by the Fullerton College graduation requirements — a minimum of three (3) units in AA GE Areas A1, A2, B1, B2 (12 units), and three (3) units from 4 of 5 areas (AA GE Area C1, C2, D1, D2, or E) (12 units) **or**
- 39 units as stipulated by the CSU general education certification requirements (CSU GE Areas A1, A2, A3, and B4 must have grades of C or better) **or**
- 37-39 units as stipulated by the IGETC (Intersegmental General Education Transfer Curriculum) requirements.
- Courses appearing in more than one area may only be counted in one area.

NOTE: General Education courses taken at either Fullerton or Cypress College will satisfy Associate Degree General Education Graduation requirements regardless of the college within the District from which he/she graduates.

## 5. Physical Education Requirement

- One unit of Physical Education Activity or Dance Activity; or
- Completion of AJ 135 F, PE 243 F, PE 266 F, or WELL 242 F
- Veterans who completed Basic Training may be eligible for one unit of PE Credit to meet this requirement. Please see the Veterans Services section for more information.

- Multicultural Education Requirement** - Beginning Fall Semester 1996, to meet this requirement every student must complete one course from the "Multicultural Education requirement" on the Associate Degree General Education Requirement sheet. A student may use the Multicultural courses to also meet a major or general education requirement for the Associate Degree. All students graduating after the year 2001 will be required to complete the Multicultural graduation component, no matter how their previous catalog rights were defined.

## 7. Reading Requirement

- Completion of a degree (AA/AS or higher) from a regionally-accredited college or university confirmed by submission of an official transcript from a regionally-accredited college or university.
- A Fullerton College placement test score indicating a placement into READ 142 F if taken prior to 11/16/2018, or a reading proficiency test approved by the Fullerton College Reading Department.
- A passing grade of C or better or Pass in READ 096 F, READ 101 F, READ 142 F, ESL 185 F or ESL 189 F; or an equivalent course

with a grade of C- or better confirmed by submission of official transcripts from a regionally-accredited college or university.

- A passing grade of C or better in any course in the IGETC (1B); or CSU GE (A3) Critical Thinking category; or an equivalent course with a grade of C- or better confirmed by submission of official transcripts from a regionally-accredited college or university.
- A passing grade of C or better in the Fullerton College AA/AS degree General Education pattern Area A2 (Analytical Thinking), or an equivalent course with a grade of C- or better confirmed by submission of official transcripts from a regionally-accredited college or university.

## Credit for Courses Completed at Other Colleges

Fullerton College may accept courses completed at other regionally accredited colleges/universities to satisfy general education requirements on Fullerton College's local AA/AS GE pattern. Students may satisfy the requirements for any Fullerton College general education area (A-D) through submission of an official transcript that demonstrates completion of a general education course at another regionally accredited college/university if it can be determined that the course clearly fits the Fullerton College Title 5 based criteria for a specific general education area. The Articulation Officer will determine if a course will meet the requirements for the Fullerton College Associate Degree General Education Subject Areas in consultation with discipline faculty as needed. A course completed at another regionally accredited college or university may be used to satisfy a Fullerton College degree and/ or certificate requirement if it is determined to be "equivalent" to a course in the Fullerton College catalog. Equivalency is determined through the evaluation of official college transcripts. In addition to course-to-course equivalency, Fullerton College will also accept courses that meet a CSU GE or IGETC requirement at the college where they are completed to satisfy Fullerton College Associates Degree general education (or "GE") requirements in the related GE area on the Fullerton College AA/AS GE pattern. The Fullerton College graduation requirements described above (in items 1-7) apply for traditional Associate in Arts (AA) and Associate in Science (AS) degrees. These graduation requirements do not apply to the Associate Degrees for Transfer, called "AA-T" and "AS-T" degrees.

## Credit for Military Training

In alignment with the practice of the CSU Chancellor's Office, Fullerton College certifies 3 units of transferable credit including full completion of Area E on the CSU General Education (GE) pattern for students who submit the Certificate of Release or Discharge from Active Duty (DD-214) indicating the completion of basic training. The intention is to award credit for the "Lifelong Learning" experience veterans get in Basic Training, which is documented on the DD-214 form. In lieu of CSU GE, students can also use the 3 units of transferable credit toward completion of Area E on the Fullerton College AA/AS General GE pattern. In addition to GE, Fullerton College also will grant prior credit for the 1-unit PE Requirement for Graduation.

**CSU GE and IGETC credit for General Education courses completed at another college/university:** Lower division general education courses completed with a passing grade at a California State University (CSU) prior to enrolling at a California community college will be accepted to meet requirements on the CSU GE pattern in the GE area for which they were approved at the CSU where the course was completed. The Articulation Office will determine if these courses may be accepted to meet the IGETC requirements that parallel the CSU GE areas, if a grade of C or better is reflected on the transcript. A general education course completed at a University of California (UC) campus, a regionally accredited independent college or university in California that does not maintain a

CSU GE-B certification list or a regionally accredited out-of-state institution of higher education under one of the following regional institutional accrediting organizations (MSA, MSCHE, NASC, NCA/NCA-HLC, NEASC-CIHE, NWCCU, SACS, WASC), may be reviewed by the Articulation Office to determine applicability to a specific CSU GE and/or IGETC requirement. The Articulation Office will determine comparability for standard general education courses through consideration of the GE pattern and specific course objectives at the institution where the course was completed. If the course is substantially comparable in content, scope, and rigor to a course that is currently on the CSU GE-B certification list for any community college it may be “passed along” in that it will be used to satisfy a requirement in the appropriate GE area. PLEASE NOTE: credit will not be awarded for Fullerton College major requirements or used to fulfill prerequisites unless the course completed is determined to be equivalent to the course required for a major or the course requisite respectively (see explanation of equivalency on previous page).

#### **Associate in Arts and Associate in Science Degrees for Transfer**

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746- 66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer,” a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) degrees are intended for students who plan to complete a bachelors degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major.

#### **In order to earn one of these degrees, students must complete:**

1. a minimum of 60 semester units of CSU-transferable coursework
2. a minimum GPA of 2.0

This 60 units includes completion of:

1. the CSU GE or IGETC pattern (for admissions to CSU, it is necessary that the students meet the “Oral Communications” requirement when using IGETC for AA-T or AS-T), and
2. 18 or more units in an AA-T or AS-T major with a grade of C or better (major requirements for each AA-T and AS-T degree provided in this catalog alphabetically by discipline).
3. 12 units in residence

#### **There are no additional graduation requirements for AA-T or AS-T degrees.**

Students transferring to a CSU campus that does accept the specific AA-T or AS-T earned as preparation for a similar major will be granted priority admission, and will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major, see specific degree requirements for more information where this applies). These degrees may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

#### **Pass Along for Students with Prior Baccalaureate and/or Associates Degrees** **Multiple Degrees**

Students may earn a traditional Associate Degree (AA/AS) from Fullerton College after receiving a baccalaureate degree or an associate degree

from another accredited U.S. Institution under one of the following regional institutional accrediting organizations (MSA, MSCHE, NASC, NCA/NCA-HLC, NEASC-CIHE, NWCCU, SACS, WASC), upon completion of the following:

1. a minimum of 24 units in residence or the last 12 units prior to awarding the degree (in any subject area unless there are residency requirements for the specific major, see major requirements for details)
2. all requirements in the major field of study, with a grade of C or better
3. other Fullerton College graduation requirements for which equivalents have not been completed, including Physical Education, Multicultural, and Reading requirements
4. a cumulative GPA of 2.0 or better
5. \*Title 5 Minimum Requirements for an Associate Degree
6. Official transcript(s) of the regionally accredited U.S. institution(s) must be submitted to Admissions and Records.

\*There will be no additional local General Education requirements as long as all Title 5 Requirements have been met.

#### **Title 5 Minimum Requirements for an Associate Degree include:**

1. Completion of an English composition course with a grade of C or better at the level of Freshman Composition (minimum of 3 semester units)
2. Completion of a mathematics course with a grade of C or better at or above the level of Intermediate Algebra (minimum of 3 semester units) or by achieving an assessment test score determined to be comparable to satisfactory completion of Intermediate Algebra or a college level math course (please note: no units are awarded if this requirement is met using an assessment test score).
3. An additional 12 semester units of General Education Requirements including at least 3 semester units in each of the GE areas below:
  - a. (3 units) Natural Sciences
  - b. (3 units) Social and Behavioral Sciences
  - c. (3 units) Humanities
  - d. (3 units) Communication and Analytical Thinking (this may be satisfied through completion of a math course at or above the level of Intermediate Algebra)

## **Multiple Associate Degrees**

Students may earn a traditional Associate Degree (AA/AS) from Fullerton College after receiving a baccalaureate degree or an associate degree from another accredited U.S. Institution under one of the following regional institutional accrediting organizations (MSA, MSCHE, NASC, NCA/NCA-HLC, NEASC-CIHE, NWCCU, SACS, WASC), upon completion of the following:

1. a minimum of 24 units in residence or the last 12 units prior to awarding the degree (in any subject area unless there are residency requirements for the specific major, see major requirements for details)
2. all requirements in the major field of study, with a grade of C or better
3. other Fullerton College graduation requirements for which equivalents have not been completed, including Physical Education, Multicultural, and Reading requirements
4. a cumulative GPA of 2.0 or better

5. Title 5 Minimum Requirements for an Associate Degree (there will be no additional local General Education requirements as long as all Title 5 Requirements have been met).
6. Official transcript(s) of the regionally-accredited U.S. institution(s) must be submitted to Admissions and Records.

**Title 5 Minimum Requirements for an Associate Degree include:**

1. Completion of an English composition course with a grade of C or better at the level of Freshman Composition (minimum of 3 semester units)
2. Completion of a mathematics course with a grade of C or better at or above the level of Intermediate Algebra (minimum of 3 semester units) or by achieving an assessment test score determined to be comparable to satisfactory completion of Intermediate Algebra or a college level math course (please note: no units are awarded if this requirement is met using an assessment test score).
3. An additional 15 semester units of General Education Requirements including at least 3 semester units in each of the GE areas below:
  - a. (3 units) Natural Sciences
  - b. (3 units) Social and Behavioral Sciences
  - c. (3 units) Humanities
  - d. (3 units) Communication and Analytical Thinking (this may be satisfied through completion of a math course at or above the level of Intermediate Algebra)

## Paralegal Studies

### Associate in Science (AS) Degree

The Fullerton College's **ABA-approved curriculum** leads to an **Associate in Science (AS) Degree** and entry-level employment in a paraprofessional capacity as an assistant to an attorney in private practice, in a governmental agency, or in private industry. This degree **requires 27 units total**, of which **21 are required courses**. An **additional 6 units** must be chosen from the restrictive electives listed below. A grade of C or better is required in all required and restrictive elective courses.

Paralegals may perform many tasks under the supervision of a licensed attorney including preparation of forms and pleadings, interviewing clients, researching and writing legal documents, managing in a law office, and preparing word processing forms and documents. **The Fullerton College Paralegal Studies Program is approved by the American Bar Association (ABA) and does not prepare students for law school or the practice of law. Under California's Business and Professions Code, Section 6450 (et seq.), a paralegal may not market his or her services to the public, but must work under the direct supervision of an attorney licensed to practice law.**

### Paralegal Studies Certificate

The **Paralegal Studies Certificate** requires the **completion of 27 units** of which **21** are in the required courses below. An **additional 6 units** must be chosen from the restrictive electives listed below. **A grade of C or better** is required in each course. All required courses must be completed at Fullerton College. Students must possess an AA, AS, BA, BS or higher degree from a **regionally accredited college**. Students with an Associate degree must have their transcript(s) evaluated for General

Education requirements as listed in the GE requirements for an Associate of Science in Paralegal Studies. **The Fullerton College Paralegal Studies Program is approved by the American Bar Association (ABA) and does not prepare students for law school or the practice of law. Under California's Business and Professions Code, Section 6450 (et seq.), a paralegal may not market his or her services to the public, but must work under the direct supervision of an attorney licensed to practice law.** Students who wish to transfer course work from another ABA-approved program may be able to transfer up to six (6) restricted elective units provided the course is the same as a course offered in the Fullerton College Paralegal Studies Program and awards exactly the same number of units. Students who wish to attain an Associate in Science Degree or a certificate from Fullerton college's Paralegal Studies Program must complete the 21 units of required courses for the major at Fullerton College. Students who wish to transfer in Paralegal Studies units must obtain prior approval from the Paralegal Department Coordinator of the Business Division Dean.

Code	Title	Units
<b>Required Courses:</b>		
PLEG 101 F	Introduction to Paralegal Studies	3
PLEG 104 F	Introduction to Legal Research and Terminology (formerly PLEG 103 F)	3
PLEG 105 F	Introduction to Legal Writing (formerly PLEG 102 F) <sup>1</sup>	3
PLEG 116 F	Computers in the Law Office	3
PLEG 201 F	Civil Litigation I <sup>1</sup>	3
PLEG 202 F	Civil Litigation II <sup>1</sup>	3
PLEG 207 F	Computer-Assisted Legal Research <sup>1</sup>	3
<b>Restrictive Electives:</b>		<b>9</b>
PLEG 090 F	Contemporary Issues in the Law <sup>1</sup>	1-3
PLEG 203 F	Tort Law (formerly Personal Injury) <sup>1</sup>	3
PLEG 204 F	Family Law <sup>1</sup>	3
PLEG 205 F	Probate, Wills and Trusts <sup>1</sup>	3
PLEG 206 F	Bankruptcy Law and Procedure <sup>1</sup>	3
PLEG 208 F	Workers' Compensation Law <sup>1</sup>	3
PLEG 209 F	Criminal Law and Procedure <sup>1</sup>	3
PLEG 210 F	Paralegal Internship <sup>1</sup>	2-4
PLEG 211 F	Real Property Law and Procedure <sup>1</sup>	3
PLEG 213 F	Employment and Labor Law <sup>1</sup>	3
PLEG 214 F	Contract Law and Procedure <sup>1</sup>	3
PLEG 215 F	Discovery in Electronic Age <sup>1</sup>	3
PLEG 216 F	Computers in the Law Office II	3
PLEG 217 F	Immigration Law <sup>1</sup>	3
PLEG 218 F	Entertainment and Sports Law	3
PLEG 219 F	Intellectual Property <sup>1</sup>	3
PLEG 220 F	Elder Law	3
PLEG 221 F	Ethics for Paralegals (formerly PLEG 090FF)	2
PLEG 223 F	Advanced Legal Research and Writing <sup>1</sup>	3
PLEG 225 F	Law Office Management	3
PLEG 226 F	Constitutional Law	3
PLEG 227 F	International Law	3

<sup>1</sup> Requires completion of prerequisites before enrollment.

The Paralegal Studies major requires **restricted general education**.

Revised 6/2021 (Dr. Lee/KTran)

## Paralegal Studies 2021-2022

### Associate In Science Degree - Fullerton College

PROGRAM CODE: 2S08434

*Program plan will depend on placement test results. This program could be adjusted.*

The Fullerton College ABA-approved Paralegal Studies Program does not prepare students for law school or the practice of law. Under California's Business and Professions Code, Section 6450 (et seq.), a paralegal may not market his or her services to the public but must work under the direct supervision of an attorney licensed to practice law.

### Degree-Oriented Paralegal Students

Code	Title	Units
<b>FIRST SEMESTER</b>		
PLEG 101 F	Introduction to Paralegal Studies	3
PLEG 104 F	Introduction to Legal Research and Terminology	3
PLEG 116 F	Computers in the Law Office	3
P.E. Activity		1
Area A1 (Written Communication): ENGL 100 F, 100HF, 101 F or 110 F		4-5
<b>Total Units</b>		<b>14-15</b>

Code	Title	Units
<b>SECOND SEMESTER</b>		
PLEG 105 F	Introduction to Legal Writing <sup>1</sup>	3
Area A2 (Analytical Thinking)		3
3 units of Paralegal Restrictive Electives		3
Area D1 (Social, Political and Economic Institutions)		3
Area B2: MATH 040 or higher		4
<b>Total Units</b>		<b>16</b>

Code	Title	Units
<b>THIRD SEMESTER</b>		
PLEG 201 F	Civil Litigation I <sup>2</sup>	3
PLEG 207 F	Computer-Assisted Legal Research (if offered) <sup>2,3</sup>	3
Area C1 (Visual Arts, Music, Theatre and Dance)		3
Area C2 (Literature, Philosophy, Religion and Foreign Language)		3-5
<b>Total Units</b>		<b>12-14</b>

Code	Title	Units
<b>FOURTH SEMESTER</b>		
PLEG 202 F	Civil Litigation II <sup>4</sup>	3
3 units of Paralegal Restrictive Electives		3
Area B1 (Physical Sciences and Life Sciences)		3-5
Area D2 (Social Behavior and Self-Understanding)		3
Optional: Students are encouraged to take:		
PLEG 210 F	Paralegal Internship	2-4
<b>Total Units:</b>		<b>12-14</b>
		<b>or</b>
		<b>14-18</b>

- <sup>1</sup> Upon successful completion of prerequisites: ENGL 100 F or ENGL 100HF or ENGL 101 F, or ENGL 110 F, PLEG 101 F, and PLEG 104 F.
- <sup>2</sup> Upon successful completion of prerequisites: PLEG 101 F and PLEG 104 F with a grade of C or better.
- <sup>3</sup> All 200 F level classes (except PLEG 216 F, PLEG 218 F, PLEG 221 F and PLEG 225 F) require the successful completion of PLEG 101 F and PLEG 104 F. PLEG 105 F requires a minimum completion of PLEG 101 F, PLEG 104 F, and ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F before a student is allowed to register.  
Please Note: PLEG 210 F and PLEG 223 F has additional requirements.
- <sup>4</sup> Upon successful completion of prerequisites: PLEG 101 F, PLEG 104 F and PLEG 201 F.

*In choosing General Education courses, make sure one course meets the Multicultural Requirement.*

**Note: Students must have a minimum of 27 Paralegal Studies units for the degree.**

## Paralegal Studies 2021-2022

### Certificate Program - Fullerton College

PROGRAM CODE: 2C21275

*Program plan will depend on placement test results. This program could be adjusted.*

The Fullerton College ABA-approved Paralegal Studies Program does not prepare students for law school or the practice of law. Under California's Business and Professions Code, Section 6450 (et seq.), a paralegal may not market his or her services to the public but must work under the direct supervision of an attorney licensed to practice law.

### Certificate-Oriented Paralegal Students

Code	Title	Units
<b>FIRST SEMESTER</b>		
PLEG 101 F	Introduction to Paralegal Studies	3
PLEG 104 F	Introduction to Legal Research and Terminology	3
PLEG 116 F	Computers in the Law Office	3
<i>If necessary: ENGL 100 F or ENGL 100HF, ENGL 101 F or ENGL 110 F (4-5 units)</i>		
<b>Total Units</b>		<b>9-14</b>

Code	Title	Units
<b>SECOND SEMESTER</b>		
PLEG 105 F	Introduction to Legal Writing <sup>1</sup>	3
3-6 units of Paralegal Restrictive Electives (PLEG 090 F and any PLEG 200 F level course) <sup>3</sup>		3-6
<b>Total Units</b>		<b>6-9</b>

Code	Title	Units
<b>THIRD SEMESTER</b>		
PLEG 201 F	Civil Litigation I <sup>2</sup>	3
PLEG 207 F	Computer-Assisted Legal Research (if offered) <sup>2,3</sup>	3



3 units of Paralegal Restrictive Electives (PLEG 090 F and PLEG 200 F level courses)<sup>3</sup>

**Total Units 9**

#### FOURTH SEMESTER

Code	Title	Units
PLEG 202 F	Civil Litigation II <sup>4</sup>	3
Optional: Students are encouraged to take PLEG 210 F Paralegal Internship		2-4
<b>Total Units</b>		<b>3 or 5-7</b>

<sup>1</sup> Upon successful completion of prerequisites: ENGL 100 F, or ENGL 100HF or ENGL 101 F or ENGL 110 F, PLEG 101 F, and PLEG 104 F.

<sup>2</sup> Upon successful completion of prerequisites: PLEG 101 F and PLEG 104 F with a grade of a C or better.

<sup>3</sup> All 200 F level classes (except PLEG 216 F, PLEG 218 F, PLEG 221 F and PLEG 225 F) require the successful completion of PLEG 101 F and PLEG 104 F. PLEG 105 F requires a minimum completion of PLEG 101 F, PLEG 104 F, and ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F before a student is allowed to register. Please Note: PLEG 210 F has additional requirements.

<sup>4</sup> Upon successful completion of prerequisites: PLEG 101 F, PLEG 104 F and PLEG 201 F.

**NOTE: Students must have a minimum of 27 Paralegal Studies units for the certificate.**

## Paralegal Studies General Education

Division: Business and Computer Information Systems

### Fullerton College 2021-2022

Courses Accepted by ABA for Paralegal General Education

## Paralegal Studies Associate in Science Degree General Education

Twenty-four (24) units total minimum requirement - Three (3) units in each of the following eight (8) sub-categories. Students must complete all courses with a grade of C or better.

### Area A: Language and Rationality (6 units)

Code	Title	Units
<b>A1. Written Communication (3 units) 3</b>		
ENGL 100 F	College Writing	4
or ENGL 100HF	Honors College Writing	
ENGL 101 F	Enhanced College Writing	5
ENGL 110 F	Enhanced College Writing for Non-Native Speakers (beg F'20)	5
<b>A2. Analytical Thinking (3 units) 3</b>		
BUS 112 F	Public Speaking for Business	4
COMM 100 F	Public Speaking	3
COMM 120 F	Intercultural Communication	3
COMM 124 F	Small Group Communication	3
COMM 135 F	Essentials of Argumentation	3

ENGL 103 F	Critical Reasoning and Writing	4
or ENGL 103HF	Honors Critical Reasoning and Writing	
ENGL 104 F	Critical Thinking and Writing About Literature	4
JOUR 110 F	Mass Media Survey <sup>2</sup>	3
or JOUR 110HF	Honors Mass Media Survey	
MATH 120 F	Introductory Probability and Statistics <sup>2</sup>	4
or MATH 120HF	Honors Introductory Probability and Statistics	
PHIL 170 F	Logic and Critical Thinking	3
PHIL 172 F	Critical Thinking and Writing	3
PSY 161 F	Elementary Statistics for Behavioral Science (beg F'13) <sup>2</sup>	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
READ 142 F	College Reading: Logical Analysis and Evaluation	3
SOSC 125 F	Introduction to Research Methods	3
<b>Total Units</b>		<b>6</b>

<sup>1</sup> New course approved by the ABA

<sup>2</sup> Course can be used in only one area (A-D)

## Area B: Natural Sciences and Mathematics (6 units)

Code	Title	Units
<b>B1. Physical Sciences and Life Sciences (3 units) 3</b>		
<i>Physical Sciences:</i>		
CHEM 100 F	Chemistry for Daily Life	4
CHEM 101 F	Chemistry for Allied Health Science	5
CHEM 103 F	Chemistry in a Changing World	3
CHEM 107 F	Preparation for General Chemistry	5
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II (beg F'13)	5
ESC 100 F	Physical Geology	3
ESC 100LF	Physical Geology Lab	1
ESC 102 F	Survey of Natural Disasters	3
ESC 103 F	Historical Geology	4
ESC 104 F	Geology of National Parks and Monuments	3
ESC 105 F	Introduction to Weather and Climate	3
ESC 106 F	Geology of Orange County Area	2
ESC 107 F	Earth Science for Educators	4
ESC 110 F	Introduction to Climate Science	3
ESC 116 F	Astronomy	3
or ESC 116HF	Honors Astronomy	
ESC 116LF	Astronomy Lab	2
ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 190 F	Environmental Geology	3
GEOG 102 F	Physical Geography	3
or GEOG 102HF	Honors Physical Geography	
PHYS 120 F	Relativity for Poets	3
PHYS 130 F	Elementary Physics	4

PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II (beg F'13)	4
PHYS 211 F	Physics with Calculus for the Life Sciences II (beg F'13)	4
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II (beg F'13)	4
PHYS 223 F	General Physics III (beg F'13)	4
TECH 088 F	Technical Science	3
<i>Life Sciences:</i>		
ANAT 231 F	General Human Anatomy (beg F'12)	4
ANAT 240 F	Human Physiology (beg F'13)	5
ANTH 101 F	Physical Anthropology	3
or ANTH 101HF	Honors Physical Anthropology	
BIOL 100 F	Principles of Biology (beg F'11)	4
BIOL 101 F	General Biology	5
or BIOL 101HF	Honors General Biology	
BIOL 102 F	Human Biology	3
BIOL 104 F	Biology of Insects and Spiders	3
BIOL 108 F	Plants and People (beg F'11)	3
BIOL 109 F	Genetics and Biotechnology in Society	3
BIOL 141 F	Marine Mammal Biology and Conservation	3
BIOL 170 F	Organismal Biology	5
BIOL 190 F	Introduction to Biotechnology	3
BIOL 222 F	Marine Biology	3
BIOL 266 F	General Zoology (beg F'11)	5
BIOL 268 F	General Botany (beg F'11)	5
BIOL 272 F	Cell and Molecular Biology (beg F'11)	4
BIOL 274 F	General Ecology	4
ENVS 105 F	Environmental Biology	3
ENVS 105LF	Environmental Biology Lab	1
HORT 152 F	Applied Botany (beg F'13)	4
HORT 205 F	Applied Entomology (beg F'13)	3
HORT 207 F	Plant Pathology (beg F'13)	3
MICR 220 F	Medical Microbiology (beg F'13)	4
MICR 262 F	General Microbiology (beg F'13)	5
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
<b>B2. Mathematics (3 units)</b>		<b>3</b>
MATH 040 F	Intermediate Algebra	4
MATH 041 F	Combined Elementary and Intermediate Algebra	6
MATH 043 F	Intermediate Algebra for Statistics and Liberal Arts	4
or higher within the Math Division		
PSY 161 F	Elementary Statistics for Behavioral Science (beg F'13) <sup>2</sup>	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
<b>Total Units</b>		<b>6</b>

<sup>1</sup> New course approved by the ABA.

<sup>2</sup> Course can be used in only one area (A-D).

## Area C: Arts and Humanities (6 units)

Code	Title	Units
<b>C1. Visual Arts, Music, Theatre and Dance (3 units)</b>		
ART 100 F	Fundamentals of Art	3
ART 110 F	Introduction to Art	3
ART 112 F	Art History - Ancient to Medieval	3
ART 113 F	Art History - Renaissance to Modern	3
or ART 113HF	Honors Art History - Renaissance to Modern	
ART 114 F	Art History - Impressionism to Present	3
ART 115 F	The Museum Experience (formerly Museum Survey)	3
ART 116 F	Art History - The Art of Mexico	3
ART 117 F	Art History - American Art (beg F'13)	3
ART 211 F	Women in the Arts	3
ART 212 F	Art History - The Art of Asia	3
ART 213 F	Art History: Pre-Columbian Art	3
CRTV 121 F	American Cinema to the 1960s	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema 1946 to Present	3
DANC 101 F	Introduction to Dance World Cultures (beg F'11)	1
DANC 200 F	Dance Appreciation - A Classical Ballet Retrospective	3
DANC 210 F	Multicultural Dance in the U.S. Today	3
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
FASH 244 F	Ethnic Costume	3
IDES 180 F	History of Architecture and Furnishings I (formerly History of Architecture I)	3
MUS 113 F	Jazz History - An Appreciation	3
MUS 116 F	Music Appreciation	3
MUS 118 F	Introduction to Opera	3
MUS 119 F	History of Rock Music	3
PHOT 111 F	Introduction to Photography from Analog to Digital (beg F'09)	3
THEA 104 F	Introduction to Theatre Appreciation	3
THEA 105 F	Musical Theatre History (beg F'12)	3
THEA 109 F	Modern Dramatic Literature	3
<b>C2. Literature, Philosophy, Religion and Foreign Language (3 units)</b>		
CDES 242 F	Introduction to Liberal Studies	3
ENGL 102 F	Introduction to Literature	3
or ENGL 102HF	Honors Introduction to Literature	
ENGL 105 F	Introduction to Creative Writing	3
ENGL 203 F	Introduction to Dramatic Literature	3
ENGL 204 F	Introduction to Poetry	3
ENGL 207 F	The Short Story	3
ENGL 208 F	Introduction to Film Studies	3
ENGL 209 F	Intermediate Creative Writing (beg F'19)	3
ENGL 210 F	Introduction to Language Structure and Use	3
ENGL 211 F	British Literature to 1800	3

or ENGL 211HF	Honors British Literature to 1800	
ENGL 212 F	British Literature since 1800	3
or ENGL 212HF	Honors British Literature since 1800	
ENGL 221 F	American Literature to the Civil War	3
or ENGL 221HF	Honors American Literature to the Civil War	
ENGL 222 F	American Literature from the Civil War to the Present	3
or ENGL 222HF	Honors American Literature from the Civil War to the Present	
ENGL 224 F	World Literature through the Early Modern Period	3
or ENGL 224HF	Honors World Literature through the Early Modern Period	
ENGL 225 F	World Literature since the Early Modern Period	3
or ENGL 225HF	Honors World Literature since the Early Modern Period	
ENGL 234 F	Introduction to Shakespeare	3
or ENGL 234HF	Honors Introduction to Shakespeare	
ENGL 239 F	Survey of Children's Literature	3
ENGL 240 F	Survey of Young Adult Literature	3
ENGL 243 F	Folklore and Mythology	3
or ENGL 243HF	Honors Folklore and Mythology	
ENGL 245 F	The Bible as Literature	3
ENGL 246 F	The Novel	3
ENGL 248 F	Science Fiction	3
ENGL 249 F	Survey of Chicano/a Literature	3
ENGL 251 F	Survey of Native American Literature	3
ENGL 254 F	Intermediate Creative Writing: Poetry (beg F'10)	3
ETHS 130 F	African-American History I <sup>2</sup>	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) (beg F'21) <sup>1,2</sup>	3
ETHS 171 F	Asian Pacific Islander American History (beg F'20) <sup>2</sup>	3
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I) <sup>2</sup>	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II) <sup>2</sup>	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) <sup>2</sup>	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) <sup>2</sup>	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	
HIST 154 F	Ancient Egypt <sup>2</sup>	3
HIST 170 F	History of the United States to 1877 (formerly History of the United States I) <sup>2</sup>	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) <sup>2</sup>	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
HIST 270 F	Women in United States History <sup>2</sup>	3
PHIL 100 F	Introduction to Philosophy	3
or PHIL 100HF	Honors Introduction to Philosophy	
PHIL 101 F	Introduction to Religious Studies	3
PHIL 105 F	World Religions	3
or PHIL 105HF	Honors World Religions	
PHIL 135 F	Social and Political Philosophy	3
PHIL 160 F	Introduction to Ethics	3
PHIL 195 F	Women's Issues in Philosophy	3
PHIL 200 F	Introduction to Christianity (beg F'11)	3
PHIL 201 F	History of Philosophy - Ancient and Medieval (beg F'11)	3
PHIL 202 F	History of Philosophy - Modern and Contemporary (beg F'11)	3
PHIL 210 F	Introduction to Judaism (beg F'11)	3
PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3
PHIL 225 F	The American Religious Experience (beg F'17)	3
PHIL 250 F	The Religion of Islam (beg F'11)	3
PHIL 270 F	Introduction to Asian Religions (beg F'11)	3
<i>Foreign Language:</i>		
CHIN 101 F	Elementary Chinese - Mandarin I	5
CHIN 102 F	Elementary Chinese - Mandarin II	5
CHIN 203 F	Intermediate Chinese - Mandarin III	4
CHIN 204 F	Intermediate Chinese - Mandarin IV	4
FREN 101 F	Elementary French I	5
FREN 102 F	Elementary French II	5
FREN 203 F	Intermediate French III	4
FREN 204 F	Intermediate French IV	4
GERM 101 F	Elementary German I	5
GERM 102 F	Elementary German II	5
GERM 203 F	Intermediate German III	4
GERM 204 F	Intermediate German IV	4
ITAL 101 F	Elementary Italian I	5
ITAL 102 F	Elementary Italian II	5
ITAL 203 F	Intermediate Italian III	4
ITAL 204 F	Intermediate Italian IV	4
JAPN 101 F	Elementary Japanese I	5
JAPN 102 F	Elementary Japanese II	5
JAPN 203 F	Intermediate Japanese III	4
JAPN 204 F	Intermediate Japanese IV	4
PORT 101 F	Elementary Portuguese I	5
PORT 102 F	Elementary Portuguese II	5
SPAN 101 F	Elementary Spanish I	5
or SPAN 101HF	Honors Elementary Spanish I	
SPAN 102 F	Elementary Spanish II	5
or SPAN 102HF	Honors Elementary Spanish II	

SPAN 201 F	Spanish for the Spanish Speaker	5
SPAN 203 F	Intermediate Spanish III	4
SPAN 204 F	Intermediate Spanish IV	4
SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3
SPAN 207 F	Children's Literature/Spanish	3
<b>Total Units</b>		<b>6</b>

<sup>1</sup> New course approved by the ABA.

<sup>2</sup> Course can be used in only one area (A-D).

## Area D: Social and Behavioral Sciences (6 units)

Code	Title	Units
<b>D1. Social, Political and Economic Institutions (3 units)</b>		
ACCT 205 F	Ethics in Accounting	3
ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	3
or ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	
ANTH 209 F	Cultures of Latin America	3
ANTH 211 F	Celtic Cultures	3
ANTH 215 F	Global Issues in Anthropological Perspective <sup>1</sup>	3
BUS 100 F	Introduction to Business	3
BUS 131 F	Principles of International Business	3
BUS 240 F	Legal Environment of Business (beg F'12)	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 242 F	International Business Law	3
BUS 245 F	Business Law I (formerly BUS 241AF)	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
ETHS 101 F	American Ethnic Studies	3
or ETHS 101HF	Honors American Ethnic Studies	
ETHS 111 F	Women of Color in the U.S.	3
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F	African-American History I (beg F'11) <sup>2</sup>	3
ETHS 131 F	African-American History II	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) (beg F'13) <sup>2</sup>	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History <sup>2</sup>	3
ETHS 202 F	Race, Ethnicity and Pop Culture <sup>1</sup>	3
ETHS 235 F	Contemporary Social Justice Movements	3
or ETHS 235HF	Honors Contemporary Social Justice	

GEOG 100 F	Global Geography	3
or GEOG 100HF	Honors Global Geography	
GEOG 130 F	California Geography	3
GEOG 262 F	Economic Geography	3
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I) <sup>2</sup>	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II) <sup>2</sup>	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) <sup>2</sup>	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) <sup>2</sup>	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	
HIST 127 F	Survey of United States History (formerly Survey of American History)	3
HIST 151 F	Survey of British History I (beg F'11)	3
HIST 152 F	Survey of British History II (beg F'11)	3
HIST 154 F	Ancient Egypt <sup>2</sup>	3
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3
HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3
HIST 165 F	Introduction to the Middle East (beg F'11)	3
or HIST 165HF	Honors Introduction to the Middle East	
HIST 170 F	History of the United States to 1877 (formerly History of the United States I) <sup>2</sup>	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) <sup>2</sup>	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3
HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
HIST 270 F	Women in United States History <sup>2</sup>	3
HIST 273 F	United States Environmental History <sup>1</sup>	3
HIST 275 F	History of California (beg F'11)	3
MKT 100 F	Introduction to Marketing	3
POSC 100 F	American Government	3
or POSC 100HF	Honors American Government	
POSC 110 F	Contemporary American Politics (beg F'11)	3
or POSC 110HF	Honors Contemporary American Politics	
POSC 120 F	Introduction to Political Theory	3
POSC 150 F	California Government and Politics	3
POSC 200 F	Introduction to the Study of Politics	3
POSC 215 F	Comparative Politics (beg F'07)	3
POSC 216 F	Government and Politics of the Middle East	3

POSC 220 F	Introduction to Public Administration	3
POSC 230 F	Introduction to International Relations (beg F'07)	3
POSC 250 F	Gender and Politics <sup>1</sup>	3
POSC 275 F	Introduction to Public Law (beg F'11)	3
SOC 201 F	Dying and Death	3
SOC 230 F	Sociology of Gender	3
or SOC 230HF	Honors Sociology of Gender	
SOC 277 F	Sociology of Religion	3
or SOC 277HF	Honors Sociology of Religion	
SOC 280 F	Media, Culture and Society	3
SOC 285 F	Drugs and Society	3
or SOC 285HF	Honors Drugs and Society	
SOC 290 F	Sociology of Race and Ethnicity	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	
SOC 292 F	Introduction to Criminology	3
or SOC 292HF	Honors Introduction to Criminology	
<b>D2. Social Behavior and Self-Understanding (3 units)</b>		<b>3</b>
ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF	Honors Cultural Anthropology	
ANTH 103 F	Introduction to Archaeology (beg F'11)	3
or ANTH 103HF	Honors Introduction to Archaeology	
ANTH 105 F	Language and Culture	3
BUS 181 F	The Entrepreneurial Mindset (formerly Business Plan Development) (beg F'17)	3
BUS 201 F	Financial Investments	3
CDES 120 F	Child Development	3
CDES 140 F	Infant and Toddler Development and Observation	3
CDES 201 F	Child in the Home and Community	3
COMM 105 F	Interpersonal Communication (beg F'20)	3
COUN 163 F	Personal Growth and Life Success	3
GEOG 160 F	Cultural Geography	3
JOUR 110 F	Mass Media Survey (beg F'13) <sup>2</sup>	3
or JOUR 110HF	Honors Mass Media Survey	
PE 248 F	Psychology of Sport (beg F'13)	3
PE 243 F	Stress Management	3
PE 244 F	Techniques and Principles of Coaching	3
PE 250 F	Sports and Society	3
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
PSY 110 F	Introduction to Applied Psychology	3
PSY 120 F	Human Sexuality	3
PSY 131 F	Cross Cultural Psychology	3
PSY 139 F	Developmental Psychology - Life Cycle	3
PSY 145 F	Child Psychology (beg F'11)	3
PSY 202 F	Research Methods in Psychology (beg F'11)	4
or PSY 202HF	Honors Research Methods in Psychology	
PSY 221 F	The Brain and Behavior	3
PSY 222 F	Abnormal Psychology (beg F'11)	3
PSY 233 F	The Psychology of Adjustment	3
PSY 251 F	Social Psychology (beg F'11)	3

or PSY 251HF	Honors Social Psychology	
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
SOC 102 F	Social Problems	3
SOC 250 F	Sociology of Aging	3
SOC 275 F	Marriage and Family	3
or SOC 275HF	Honors Marriage and Family	
SOSC 130 F	Introduction to LGBTQ Studies	3
WMNS 100 F	Introduction to Women's Studies	3
or WMNS 100HF	Honors Introduction to Women's Studies	
<b>Total Units</b>		<b>6</b>

<sup>1</sup> New course approved by the ABA.

<sup>2</sup> Course can be used in only one area (A-D).

## Graduation Requirement for Paralegal Studies Associate in Science Degree

1. Completion of **27** units of specified course work in the major with a grade of **C or better**.
2. Completion of **24 units of general education** as shown above with a grade of C or better in all courses (NOTE: this is different from the standard AA/AS degree general education list for other majors at Fullerton College).
3. Completion of **one (1) unit of physical education activity**; AJ 135 F or PE 243 F or PE 266 F or WELL 242 F. The exception for 21 year-olds no longer applies.
4. Completion of the **Multicultural Education Requirement - this can also count as a GE course** (see below).
5. Completion of MATH 040 F or higher satisfies the Math graduation requirement.
6. Completion of additional units will be needed to meet the total of at least **60 degree applicable units** required for graduation. An overall **GPA of 2.0** (or better) is required.

## Multicultural Education Requirement

Every student must complete the **Multicultural Education Requirement to graduate with an AS degree**. Refer to the current college catalog for courses that meet this requirement. **Note:** Students may also use the same course to meet both the Multicultural and a general education requirement as long as the course is also on the above General Education list for the Paralegal AS degree. For example, SOC 101 F meets both the Multicultural and a GE requirement for D2.

## Reading Requirement

Completion of a degree (AA/AS or higher) from a regionally-accredited college or university confirmed by submission of an official transcript from a regionally-accredited college or university **OR** test into READ 142 F if taken prior to 11/16/2018, or a reading proficiency test approved by the Fullerton College Reading Department **OR** a passing grade of C or better in READ 096 F (formerly READ 056BF), READ 101 F, READ 142 F, ESL 185 F or ESL 189 F; or an equivalent course with a grade of C- or higher confirmed by submission of official transcripts from a regionally-accredited college or university **OR** a passing grade of C or better in any course in the IGETC (1B); or CSU GE (A3) Critical Thinking category; or an equivalent course with a grade of C- or higher confirmed by submission of official transcripts from a regionally-accredited college or university **OR** a passing grade of C or better in the Fullerton College AA/AS degree

General Education pattern Area A2 (Analytical Thinking), or an equivalent course with a grade of C- or higher confirmed by submission of official transcripts from a regionally-accredited college or university.

## Admissions and Records/Registration

- Academic Accommodations for Students with Disabilities (p. 46)
- Admission Requirements (p. 46)
- Bursar's Office (p. 46)
- Corrections to Student Information (p. 46)
- Military Experience Credit (p. 46)
- International Students (p. 47)
- Matriculation (p. 48)
- Matriculated Student Responsibilities (p. 50)
- Open Enrollment Policy (p. 50)
- Refunds (p. 50)
- Registration (p. 50)
- Residency for Tuition Purposes (p. 50)
- Special Admit Students (p. 52)
- Student Fees (p. 52)
- Transcripts (p. 53)
- Verification of Student Status (p. 54)

The college catalog must be prepared well in advance of the time period it covers; therefore, changes in some programs and policies may occur. Courses as described are subject to change without notice, and some listed courses are not offered each year. In addition, some courses or programs that are offered may have to be cancelled because of insufficient enrollment, elimination or reduction in programs, or for any other reason considered sufficient by the College president or designee.

## Academic Accommodations for Students with Disabilities

In accordance with Federal and State regulations, procedural language has been established to address the provision of educational accommodations to students with disabilities who are otherwise qualified to participate in the College's courses, programs and activities. Copies of the procedure are available in all Division Offices and Student Services areas. (See Disability Support Services (p. 531))

## Admission Requirements

The following persons are eligible to enroll in Fullerton College:

- High school graduates or equivalent and students at least eighteen years of age.
  - Title IV Financial Aid requirements differ. For Title IV financial aid, a high school diploma or equivalent is required. For more information, click here ([https://catalog.nocccd.edu/fullerton-college/admissions-records-registration/admission-requirements/\(https://financialaid.fullcoll.edu/wp-content/uploads/sites/77/2020/11/Financial\\_Aid\\_Brochure\\_You\\_Consumer\\_Brochure\\_2020-2021.pdf\)](https://catalog.nocccd.edu/fullerton-college/admissions-records-registration/admission-requirements/(https://financialaid.fullcoll.edu/wp-content/uploads/sites/77/2020/11/Financial_Aid_Brochure_You_Consumer_Brochure_2020-2021.pdf))). ([http://financialaid.fullcoll.edu/pdf/Consumer\\_Brochure\\_2019-2020\\_rev\\_2019-06-06.pdf](http://financialaid.fullcoll.edu/pdf/Consumer_Brochure_2019-2020_rev_2019-06-06.pdf))
- Students in K-12 who qualify for the Special Admit Program.

- International Students who are eligible under a student visa (F-1). For information on the application procedure for International Students, contact the International Student Center at 1-714-992-7078 or visit <http://isc.fullcoll.edu> (<http://isc.fullcoll.edu/>).

## Bursar's Office

**Student Services 2000 Building, 1st Floor**

**Website:** <http://fcbursar.fullcoll.edu>

**Phone:** (714) 992-7006

**Hours: Mon-Fri: 8:00 am to 5:00 pm**

The Bursar's Office (aka Campus Accounting), collects, processes, and records the numerous daily financial transactions that occur around campus. This office handles the banking, pays the bills, and processes deposits and requisitions for the college's numerous trust accounts. The Bursar's Office administers funded scholarships and approved third-party tuition payments. It is also the disbursing location for some Financial Aid grants such as Chaffey. More information can be found on their website.

## ATM

The campus has two full-service Automated Teller Machines (ATMs) with 24-hour access. One is located on the main side of the campus on the north side of the 500 building. The second is across Chapman Avenue in front of the Bookstore, Building 2000. Both machines accept several different types of credit and bank debit cards. This service is offered by the SchoolsFirst Federal Credit Union (formerly OCTFCU) and is not affiliated with or a responsibility of the college or the Associated Students. Both machines dispense \$5 and \$20 bills and assess a charge for non-members of the credit union co-op. No charge will be assessed to students using their Higher One card.

## Corrections to Student Information

Documentation, such as, a marriage license, court order, naturalization papers, or other government issued identification is required for verifying a legal name change or date of birth. Requests to have a student's name or date of birth changed on official college records are submitted to the Admissions and Records Office.

Social Security number corrections are submitted to the Admissions and Records Office. Documentation substantiating the correction will be required.

Students do have the option to submit a chosen/preferred name to be displayed on class rosters, diplomas, etc. Requests to have a student's chosen/preferred name added to their record are submitted to the Admissions and Records Office.

## Military Experience Credit

College level correspondence courses completed through the United States Armed Forces Institute (USAFI) will be accepted for credit. The transcript for such courses must be mailed directly to the Admissions and Records Office from DANTES Contractor Representative (transcripts), Madison, Wisconsin 53713.

Service training schools conducted by the various branches of the Armed Forces are accepted for credit value as recommended by the latest edition of *A Guide to the Evaluation of Educational Experiences in the Armed Forces*; American Council on Education.

A student may petition for an evaluation of military education and experience upon completion of 40 degree applicable units from an accredited college or university, including a minimum of 12 units at Fullerton College. It is the student's responsibility to petition for credit through the Veterans Resource Center.

A photocopy of the DD214 (discharge papers) must be submitted with the evaluation petition. The credit awarded is elective only and posted to the transcript upon graduation from Fullerton College. Elective credit granted for military work will not exceed 30 units.

## International Students

### F-1 Student Visa

The goal of the International Student Center (p. 534) is to provide educational opportunities for international students and to promote international understanding on campus and in the community. The following regulations govern the admission of F-1 student visa students to Fullerton College.

1. Application deadlines are as follows: Applicants must submit complete applications by July 1 (Fall) and December 1 (Spring). A \$40 non-refundable application fee is required for processing.
2. F-1 visa students are required to pay non-resident tuition, enrollment and health fees and are strongly encouraged to purchase a Campus Photo ID Card. See "Student Fees (p. 52)" for additional information.
3. F-1 visa students are required to complete a full course of study (minimum of 12 units) each Fall and Spring semester. In accordance with Federal regulations, failure to do so will be reported to the U.S. Department of Homeland Security.
4. Criteria for admission of F-1 visa students:
  - a. The applicant must demonstrate English proficiency as indicated by a minimum TOEFL score of 61 (iBT), an IELTS score of Band 5, or an iTEP score of Level 3.5.
  - b. Applicants must be at least 18 years of age or have earned the equivalent of an American high school diploma or have attended 12 years of elementary and secondary schools. The student must submit academic records accompanied by a certified English translation. Evaluations of foreign transcripts and other admission documents will be based upon the recommendations of The Country Index, The World Education Series of the American Association of Collegiate Registrars and Admissions Officers, or other sources.
  - c. Applicants must provide evidence of financial responsibility. Certification of Parent, Self, or Sponsor Support and Bank Certification are required. Bank statements must be translated into English and represent American currency.
  - d. Applicants must submit original copies of transcripts of any college coursework completed. Foreign language transcripts must be accompanied by certified English translations.
  - e. Applicants must submit an essay describing their academic and career goals at Fullerton College (minimum 700 words).
  - f. Applicants must submit a copy of their valid passport and a 2"x 2" photograph.
  - g. Applicants who have attended other U.S. colleges or universities may be considered for admission provided the applicant meets Fullerton College admission requirements and is in status with U.S. Department of Homeland Security. F-1 visa applicants who

have completed two or more years of college will be advised to seek admission to an institution offering upper division courses.

- h. Applicants who have earned a Bachelors or Masters Degree must submit the 2nd Bachelors/Masters Contract.
- i. Applicants who plan to transfer from another U.S. college, university, or English language school must submit:
  - Copy of visa
  - Copy of the electronic I-94
5. The F-1 visa student shall be held to the same scholastic requirements and to the same College rules and regulations as other students.
6. F-1 visa students must purchase the health and accident insurance policy mandated by the college. This policy includes major medical coverage including repatriation and evacuation. Students who do not purchase health insurance will not be able to register for courses.
7. F-1 visa students are required to comply with U.S. Code of Federal Regulations, Department of Homeland Security (DHS), U.S. Citizenship and Immigration Services (CIS), and U.S. Immigration and Customs Enforcement (ICE) regulations that pertain to F-1 visa students. Review Code of Federal Regulations, Title 8 CFR Part 22 Section 214.2(f).
8. F-1 visa students will not be accepted for admission into any program where applications by qualified U.S. citizens exceed spaces available.

### F-2 Student Visa

#### F-2 Visa Regulations

U.S. Federal Register states "accompanying spouses and children of academic and vocational nonimmigrant students with F-1 or M-1 nonimmigrant status to enroll in study at an SEVP-certified school so long as any study remains less than a full course of study. F-2 and M-2 spouses and children remain prohibited from engaging in a full course of study unless they apply for, and DHS approves, a change of nonimmigrant status to a nonimmigrant status authorizing such study."

1. F-2 visa high school students must follow the admission procedures of the International Student Center and submit the Fullerton College Special Admit packet to the Admissions and Records Office.
2. Application deadlines are as follows: Applicants must submit complete applications by July 1 (Fall) and December 1 (Spring). A \$20 non-refundable application fee is required for processing.
3. F-2 visa students are required to pay non-resident tuition, enrollment, and health fees. Students are also strongly encouraged to purchase a Campus Photo ID Card. See "Student Fees (p. 52)" for additional information.
4. F-2 visa students may register in a maximum of 11 units each Fall and Spring semester.
5. Criteria for admission of F-2 visa students:
  - a. Applicants must provide evidence of financial responsibility. Certification of Parent, Self, or Sponsor Support and Bank Certification are required. Bank statements must be translated into English and represent American currency.
  - b. Applicants must submit:
    - 2"x 2" photograph
    - Copy of F-2 I-20
    - Copy of their valid passport
    - Copy of F-2 visa
    - Copy of the electronic I-94
    - F-2 Status Verification Form

- Consent to Treat a Minor Form, if 17 or younger  
After completion of the listed requirements, the applicant will be considered for admission and will be notified within two weeks. When accepted, the applicant will be sent an acceptance letter, along with registration and orientation materials.

6. The F-2 visa student shall be held to the same scholastic requirements and to the same college rules and regulations as other students.
7. F-2 visa students are required to comply with U.S. Code of Federal Regulations, Department of Homeland Security (DHS), U.S. Citizenship and Immigration Services (CIS), and U.S. Immigration and Customs Enforcement (ICE) regulations that pertain to F-1 visa students. Review Code of Federal Regulations, Title 8 CFR Part 22 Section 214.2(f).

## F-1 Visa Concurrent Enrollment

Students enrolled full time at another institution from which they have a valid I-20 are permitted to enroll at Fullerton College on a part-time basis. The “F-1 Student Enrollment Agreement” form must be completed, approved by the student’s school and the Fullerton College International Student Center and submitted with the application for admission. F-1 students must pay all appropriate tuition and fees. A \$20 non-refundable application fee is required for processing.

## B-1/B-2 Tourist Visa Regulations

U.S. Federal Code states that B visa holders “violate the conditions of his/her status if he/she enrolls in a course of study. [Those] who desire to enroll in a course of study must either obtain an F-1 or M-1 non-immigrant visa from a consular officer abroad and seek re-admission to the United States, or apply for and obtain a change of status.” B visa holders are encouraged to speak directly with the International Student Center about obtaining F-1 status in order to legally enroll at Fullerton College. Expired B visa holders are encouraged to speak directly to the Admissions & Records office for more information. **For more information regarding international student admissions and the F-1 visa, visit <http://isc.fullcoll.edu>. Students may contact the International Student Center at (714) 992-7078 or send an email to [isc@fullcoll.edu](mailto:isc@fullcoll.edu).**

## Visa Dependence

Legal stay typically expires when a dependent child turns 21. Dependent children should contact the International Student Center 6-12 months before turning 21 to discuss a possible change of an F-1 status.

## Permanent Resident Status

Students applying for admission may be asked to present their permanent resident cards, and/or other immigration documents at the time of application. Residency is based on one year from the date on the application for the visa, permanent resident card, or other immigration document. Students must have resided in California for one year and one day prior to the start of the semester, as set by the Board of Trustees. Other documentation may be required to qualify for resident tuition.

## Other Visas

Visa regulations subject to change. Contact the Admissions and Records Office for further information.

# Matriculation

Matriculation is a process by which the student and the college enter into an agreement in order to identify and achieve the student’s educational

goals. In compliance with the Student Success Act of 2012 (SB1456), and Fullerton College’s long-standing commitment to help students succeed, all non-exempt students seeking to enroll in courses will participate in some or all of the components of the matriculation program.

## Matriculation Status

Students **may** be exempt from orientation, assessment, counseling, advising, or student education plan development when proof of one or more of the following is provided:

1. Completion of an associate degree or higher;
2. Enrolled at the college for a reason other than career development or advancement, transfer, attainment of a degree or certificate of achievement, or completion of a basic skills or English-as-a-Second Language course sequence;
3. Completion of an approved assessment test within the last two years (assessment test scores must be provided);
4. Enrolled at the college solely to take a course that is legally mandated for employment as defined in section 55000 or necessary in response to a significant change in industry or licensure standards;
5. Enrolled at the college as a Special Admit Student pursuant to Education Code section 76001 (and not intending to take courses in math, reading, English and/or ESL).

Any student who receives exemption from one or more of the above services will not be eligible to receive priority registration.

Any student exempt from orientation, assessment, counseling, advising, or student education plan development may choose to participate in these services.

A student may petition to be EXEMPT from one or more matriculation requirements by completing and filing a “Matriculation Services Eligibility Form.” These forms are available from the counseling office. The completed form **must** be filed with the Dean of Counseling or Matriculation Coordinator. Students will be notified of action on their petition no later than three days after the petition is filed.

## Matriculation Services

Matriculated (non-exempt) students will be provided the following services:

1. **Orientation** — Students will receive an overview of college services, programs, certificates, degrees, majors, and registration procedures. Assessment test scores are explained as guides for registering for writing, reading, ESL and mathematics courses. Orientation is completed online prior to assessment testing and may be accessed through each student’s personal myGateway account.
2. **Skills Assessment** — Students will receive an evaluation of their learning skills in reading, English, English as a Second Language (ESL), mathematics and/or chemistry. This is done through the use of tests, review of past school records (high school and college), and other information presented during a counseling interview. Assessment tests are available for native speakers of English as well as for those with limited English proficiency.
3. **Counseling** — Students will receive assistance from counselors to plan their semester class schedule and to initiate a Student Educational Program Plan. All students are encouraged to visit a counselor during the year. Online counseling is available to students seeking answers to general questions about policies and procedures, program requirements, prerequisites, course offerings,



services and transferability of courses. Online counseling may be reached through the counseling department homepage at <http://onlinecounseling.fullcoll.edu/>.

4. **Student Educational Program Plan** – New students are encouraged to see a counselor for help planning their courses prior to their appointed registration time. Students should see a counselor for assistance in developing a Student Educational Program Plan (SEPP) no later than the semester after they complete 15 units.
5. **Follow-Up** – Progress checks and assistance by counselors and instructors help students make successful progress towards their goals. Students on academic/progress probation are notified at the end of each regular term and students on dismissal status are notified each year at the end of the Spring term.

These matriculation services are designed to provide assistance to students so that their opportunities for success and achievement of their goals are improved. Students wishing to defer any aspect of the matriculation process may do so at the Counseling Department. Students wishing to appeal any decisions or recommendations regarding courses to be taken based upon assessment results may file a petition with the Dean of Counseling or Matriculation Coordinator (see Matriculation Appeals).

## Matriculation Appeals Procedures

All matriculated students have the right to challenge or appeal any step in the matriculation process. A Matriculation Appeals Petition may be filed for any of the following concerns:

1. **Petition for exemption** – Students may petition to be exempted from assessment, orientation and/or counseling. The student shall complete and file a “Matriculation Services Eligibility Form” with the Dean of Counseling or Matriculation Coordinator. The Dean of Counseling or Matriculation Coordinator will notify the student within three days of the decision regarding his/her appeal.
  2. **Review of placement decisions** – For English as a Second Language (ESL), English or reading placement appeals, the student shall make an appointment with the Dean of Counseling. The Dean of Counseling shall see the student within three (3) working days. If the Dean of Counseling is unavailable within that time, the student shall take the appeal directly to the Dean of Humanities. For mathematics placement appeals, the student shall make an appointment with the Dean of Counseling. The Dean of Counseling shall see the student within three (3) working days. If the Dean of Counseling is unavailable within that time, the student shall take the appeal directly to the Dean of Mathematics and Computer Science. In all cases, the student shall present documents and information to support his/her appeal. The decision of the Dean shall be given in writing and shall serve as final decision in the appeal. Students approved for a higher course placement should see a counselor for course clearance for registration purposes.
  3. **Enrollment limitations: prerequisites/corequisites** – A prerequisite is a requirement that must be met **before** enrollment in a restricted course may be permitted. Course prerequisites are identified in the College Catalog. Section 55003 of the Matriculation Regulations permit the following types of prerequisites and corequisites:
    - a. Completion of any course in a sequence of related courses if understanding or technical performance is necessary for success in later courses in the sequence. An example of this is a foreign language sequence. Before enrolling for SPAN 203 F it may be necessary to complete SPAN 101 F and SPAN 102 F.
    - b. Prerequisites may also refer to skills measured by assessment instruments, methods or procedures where a required level of performance is necessary for success in a course or program. Some ways in which skills are measured are through placement tests, high school transcripts, or counselor interviews which help determine placement in English, ESL, reading and mathematics.
  - c. Enrollment limitations may also include corequisites, which generally require a student to **concurrently** enroll in one course as a condition of enrollment in another course.
- Student Rights to Challenge Prerequisites/Corequisites:** Section 55003 of Title V states: Any prerequisite or corequisite may be challenged by a student on one or more of the grounds listed below. The student shall bear the initial burden of showing that grounds exist for the challenge. Challenges shall be resolved in a timely manner and, if the challenge is upheld, the student shall be permitted to enroll in the course or program in question. Grounds for challenge are:
1. The prerequisite or corequisite has not been established in accordance with the district’s process for establishing prerequisites and corequisites.
  2. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.
  3. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.
  4. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available.
- How to Challenge Prerequisite/Corequisite:**
- A petition to challenge a prerequisite/corequisite may be filed with the Dean of the division responsible for the course. All petitions must be filed prior to the first day of the semester.
  - A petition to challenge a prerequisite/corequisite because the prerequisite/corequisite was not established in accordance with the district’s process for establishing prerequisite/corequisites or because the student has prior knowledge or ability to succeed in the course may be filed with the Dean of the division responsible for the course.
  - A petition to challenge a prerequisite/corequisite because it is discriminatory or is being applied in a discriminatory manner may be filed with the Matriculation Coordinator who will convene a committee consisting of the Director of Equity and Diversity, the Matriculation Coordinator and a member of the Matriculation Committee to review the petition.
  - Students wishing to appeal the decision of the Dean(s) may do so by meeting with the Vice President of Instruction. Students wishing to appeal the decision of the committee regarding a discriminatory application of a prerequisite or corequisite may do so by meeting with the Dean of Counseling.
5. **Complaint of unlawful discrimination** – If a student feels assessment, orientation, counseling, prerequisites (or any other Matriculation procedure) is being applied in a discriminatory manner, a petition may be filed with the Matriculation Coordinator. The Matriculation Coordinator shall convene a three (3) member panel consisting of the Director of Equity and Diversity, the Matriculation Coordinator and an additional member to review the student’s petition. The panel shall meet and provide a written notification to the student within seven (7) working days. (Students wishing to appeal the committee’s decision may do so by meeting with the Dean of Counseling.) Petitions for the above appeals are available in the Counseling Center.

## Matriculated Student Responsibilities

All students shall be required to:

1. Identify an education and career goal
2. Diligently engage in course activities and complete assigned coursework
3. Complete courses and maintain progress toward an educational goal and completing a course of study
4. Complete a comprehensive educational plan after completing 15 semester units of degree applicable credit coursework or prior to the end of the third semester of enrollment.

Non-exempt first-time students shall, within a reasonable period of time, be required to:

1. Identify a course of study
2. Be assessed to determine appropriate course placement
3. Complete an orientation activity provided by the college
4. Participate in counseling, advising, or another education planning service pursuant to section 55523 to develop, at a minimum, an abbreviated student education plan.

For further information regarding the above Matriculation information, contact the Matriculation Coordinator at (714) 992-7245.

## Open Enrollment Policy

It is the policy of the District that, unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for State aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to Chapter 11 Division Two Part VI, Title 5 of the California Administrative Code, commencing with Section 51820.

## Refunds

(Pursuant to section 58508 of Subchapter 6 of Chapter 9 of Division 6, Title 5 of the California Code of Regulations.)

Students who withdraw from the college or drop semester-length classes during the first two weeks of the Fall and Spring semester will be eligible for a refund. This includes enrollment, tuition, health, A.S. sticker, Student Representative and parking fees. Refer to the current class schedule or contact the Admissions and Records Office for refund deadlines for short term, late starting or Summer term classes, as deadlines can be as early as the first or second day of class. A refund processing fee of \$10 will be withheld once each term.

Refunds will be mailed approximately 6-8 weeks after the beginning of the semester.

## Registration

Registration is the process of becoming officially enrolled in classes. All new and former (returning) students must submit an application online through OpenCCCAApply and be admitted to the college before

registering. Visit the website at <https://admissions.fullcoll.edu/online-application/> for information and instructions.

Registration is by appointment. See below for priority registration criteria:

## Continuing Student

Currently enrolled at Fullerton College and will receive a grade or "W"

- To qualify for priority registration, continuing students MUST:
  - Not have exceeded 100 units (not including units in basic skills courses)
  - Be in good academic standing
    - Not have been academically dismissed
    - Not have been on probationary status for two consecutive terms
- If the above requirements have been met, registration appointments will be based on **units/hours earned** at both Fullerton and Cypress colleges.

## Dual Enrollment Student

K-12 grade level students concurrently enrolled and attending Fullerton College classes at their high school.

## Former (Returning Student)

Previously attended Fullerton College or Cypress College and received a grade or "W":

- To qualify for priority registration, former (returning) students MUST meet BOTH "Continuing Student" and "New Student" requirements.

## New Student

Never enrolled in classes at Fullerton College or Cypress College:

- To qualify for priority registration, new students MUST complete the following:
  - Online Orientation
  - Assessment
  - Student Education Plan
- If the above requirements have been met, registration appointments are based on application submission date

## Special Admit Students

K-12 grade level students concurrently enrolled at Fullerton College

- Special Admit students are not eligible for priority registration

Throughout the registration process (including class petitioning), certain deadlines have been established. These deadlines are necessary in order to comply with State attendance laws and must be followed by all faculty and students. Failure to comply with these deadlines may result in the student not being allowed to attend or receive credit for the class.

## Residency for Tuition Purposes

(per Education Code, Section 68060)

The Office of Admissions and Records determines the resident status of all new and returning students. Responses to the Application for Admission and, if necessary, other evidence furnished by the student are used in making this determination. It is the student's responsibility to provide

documentation that clearly demonstrates both physical presence and the intent to establish California residence. A student who does not submit adequate information to establish the right to classification as a California resident will be classified as a non-resident for tuition purposes. Some visa types are precluded by federal law from establishing residency.

The residence determination date is the day immediately preceding the opening day of instruction of the semester as set by the Board of Trustees. Generally, residency requires actual physical presence in California for at least one year prior to the residence determination date, coupled with proof of the intent to make California one's home. Generally, California residency is established by one of the following:

1. If the applicant is 18 or under, his or her parents or legal guardian must have had legal residence in California for a minimum of one year and one day prior to the start of the semester.
2. If the applicant is 19 years of age or older, the applicant must have residence in California for a minimum of one year and one day prior to the start of the semester.

Non-citizen students holding visas which do not preclude them from establishing residency in California (for example: permanent resident, refugee status, or amnesty approval), must have legal residence in California for a minimum of one year and one day prior to the start of the semester.

## Factors Considered to Determine Residency

A person's presence in California and the factors below are considered in determining California residency. No one factor determines residency.

- Being licensed to practice a profession in California
- Filing California State Income taxes as a resident
- Having an active checking and/or savings account in a bank in California
- Having paid non-resident tuition in another state
- Owning residential property in California for personal use
- Possessing a California Driver's License and a vehicle registration in California
- Showing proof of employment in California
- Possessing a divorce decree issued in California
- Showing California as "home of record" on military records (DD214 or Leave and Earnings Statement)
- Voting in California

**Important:** Residence classification is determined for each student when the admission application is accepted. Any student who is classified as a resident, but who becomes a non-resident at any time by virtue of a change of residence, by his or her own action or by the person from whom his or her residence is derived, is obligated to notify the Admissions & Records Office immediately.

## Non-Resident Student

A student's residence status is determined at the time of application. A student classified as a non-resident must pay non-resident tuition in addition to the enrollment fee and other fees (including a \$57 Capital Outlay Fee per Ed Code 76141) for credit classes.

## Assembly Bill 540

Any student, other than a non-immigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition

at the California Community Colleges, the California State University and the University of California (all public colleges and universities in California).

Students who are nonimmigrants [for example, those who hold F (Student) visas, B (Visitor) visas, etc.] are not eligible for this exemption.

### Who Qualifies?

- An alien student who is without lawful immigrant status (undocumented, out of status)
- Students who are nonimmigrants and who are victims of trafficking, domestic violence, and other serious crimes who have been granted T or U visa status, under Title 8 of the United States Code, Sections 1101(a)(15)(T) or (U) are eligible for this exemption

A U.S. Citizen and/or Permanent Resident card holder who does not meet the California residency requirement

### Requirements

- Attended high school in California for three or more years,
- Attended a combination of California high school, California adult school, and/or California Community College for the equivalent of three or more years of full-time attendance,
- Attained credits earned in California from a California high school equivalent to three or more years of full-time high school course work and attended a combination of elementary, middle/secondary, and/or high schools in California for a total of 3 or more years.
- Graduated from a California high school or attained the equivalent (i.e., GED or Certificate of High School Proficiency) prior to the start of the term,
- Attained an associate degree from a California Community College,
- Completed the minimum requirements at a California Community College for transfer to a California State University or University of California.

In the case of a person without lawful immigration status, the filing of an affidavit with the college stating that the student has filed an application.

## Assembly Bill 2364

Community college districts are **mandated** to exempt non-shy;resident special part-time students from the requirement to pay non-resident tuition for community college credit courses. The term "special part-time student" refers to students who have been recommended by the principal of the pupil's school and have parental permission to attend a community college during any session or term and who enroll in 11 or fewer units per semester, or the quarter equivalent, in accordance with Education Code section 76001. The exemption does not apply to special full-time students.

This exemption is not intended to apply to categories of students who would be precluded from qualifying for the AB540 non-resident tuition exemption:

1. students who reside outside of California and enroll via Distance Education, and
2. students with non-immigrant visas (except students traded a T or U visa).

A student receiving a non-resident tuition exemption under AB2364 does not receive resident status for the purpose of fees or financial aid.

## Senate Bill 141

This bill requires districts to exempt non-resident tuition from a non-resident student who is a U.S. citizen and who resides in a foreign country, if that student meets all of the following requirements.

1. Demonstrates a financial need for the exemption.
2. Has a parent or guardian who has been deported or was permitted to depart voluntarily under the federal Immigration and Nationality Act.
3. Moved abroad as a result of the deportation or voluntary departure.
4. Lived in California immediately before moving abroad.
5. Attended a public or private secondary school in California for three or more years.
6. Upon enrollment, will be in his or her first academic year as a matriculated student in California public higher education.
7. Will be living in California and will file an affidavit with the community college stating that he or she intends to establish residency in California as soon as possible.
8. Documentation shall be provided by the student as required by statute as specified in Education Code section 76140(a)(5).

A student receiving a non-resident tuition exemption under SB141 does not receive resident status for the purpose of fees or financial aid. Rather they are exempt from non-resident tuition fees under this law. These students do not qualify for the California College Promise Grant (CCPG) or any other state financial aid until they establish California residency. As citizens, SB141 students may apply and qualify for federal financial assistance such as Pell, FSEOG and federal student loans.

## Special Admit Students

Students may enroll in college classes as Special Admit students while concurrently enrolled at another school at the K-12 grade level. Enrollment is exclusively for advanced, scholastic, vocational, and enrichment courses. Special Admit students must be recommended by their principal or school designee and must meet all course prerequisites. K-8 students must also be recommended by the respective Instructional Dean at the college.

### Persons under 18 years of age who are not enrolled in public schools:

Persons participating in Home School Programs or persons under 18 years of age who have not graduated from high school and are not currently enrolled in school may also be eligible as Special Admit students. Home School Programs (9th-12th grade) must be accredited by the Western Association of Schools and Colleges. Students participating in a home school program must obtain the signature of the College President or designee on the Special Admit application.

If a local high school or ROP program offers a course in the subject area requested, the student may **not** enroll in the equivalent course at Fullerton College.

Applicants must pay all applicable fees at the time of registration.

Part-time Special Admit students (enrolled in 1-11 units) in grades 9-12 are exempt from enrollment fees, but must pay health fee and other applicable fees.

Part-time Special Admit students (enrolled in 1-11 units) in grades K-8 must pay health fee and any other applicable fees..

Full-time Special Admit Students (enrolled in 12 units or more) must pay enrollment, health fee, and any other applicable fees.

### Students on an F-1 visa are not eligible to enroll as a Special Admit student.

Restrictions are placed on high school students wishing to take some Fullerton College courses, including, but not limited to, English, ESL, reading and math.

For further information on the Special Admit Program, contact the Admissions & Records Office ([admissions@fullcoll.edu](mailto:admissions@fullcoll.edu)) or the Counseling Division at (714) 992-7084.

## Dual Enrollment Students

Dual Enrollment is an early college enrollment opportunity allowing students to take college classes at their high school. Students can enroll in a free college class on a high school campus and earn college and high school credit at the same time. Dual Enrollment students must be recommended by their principal or school designee and must meet all course prerequisites. K-8 students must also be recommended by the respective instructional Dean at the college.

For further information on the Dual Enrollment Program, contact Admissions & Records at (714) 905-5162 or the Counseling Division at (714) 992-7084.

## Student Fees

- Fees are subject to change
- Fees are payable by check or credit card

Returned checks must be paid in the form of cash or money order, and a \$25 service charge will be added to the amount owed.

All checks returned for "Stop Payment" will also be subject to the \$25 service charge. A student's enrollment at Fullerton College as well as his/her credit may be affected.

## A.S. Benefits Validation

See "Student Activities (<https://catalog.nocccd.edu/fullerton-college/student-activities/>)."

## Campus Photo ID Card

All students are strongly encouraged to purchase a campus identification card. This card serves as positive photo identification for the Library, the Admissions and Records Office, various labs, the Bookstore, and other needed areas/services. A current Schedule/Bill and valid picture ID is needed at the time of production and/or validation. The charge for a Campus ID Card is \$3.50. All ID cards not picked up by the last day of the semester purchased will be voided. Replacement and voided Campus ID cards are also \$3.50.

## Course Fee

These fees are noted in the class schedule.

## Enrollment Fee

The enrollment fee is \$46 per unit. This fee is subject to change by legislative action.

## Health Fee

All students who enroll in classes through Fullerton College are required to pay a \$21 Health Fee per semester (\$18 for the Summer term). This Health Fee entitles students to a variety of health services. Health Fees are charged to all students whether or not they choose to use health services. Courses taken off campus, online, and during the weekend are also required to pay the Health Fee.

Any student who depends exclusively on prayer for healing in accordance with the teachings of a bona-fide religious sect, denomination or organization is exempt from paying the health fee. Upon request, the health fee will be refunded to any student who drops from all courses prior to the 10% date of the length of the course.

## Non-Resident Tuition Fee

All non-resident students will be charged \$331 per semester unit for the 2021-2022 school year as well as an additional charge for capital outlay of \$57 per unit.

**Note:** All non-residents must also pay the enrollment fee and health fee.

## Non-Resident Capital Outlay Fee

All non-resident students will be charged a capital outlay fee of \$57 per semester unit for the 2021-2022 school year. **Note:** All non-residents must also pay the enrollment fee and health fee.

## Parking Fee

To park on campus, parking permits can be purchased:

\$40 (\$20 during Summer Term)	Auto
\$20 (\$10 during Summer Term)	Motorcycle
\$30 (\$20 during Summer Term)	Students with CCPG Fee Waiver

Parking fees may be paid during registration. A limited amount of metered parking is available. For additional information, see "Parking (p. 57)" under "College Policies (p. 55)."

## Student Representation Fee

The \$2 Student Representation Fee is a voluntary \$2 donation collected at the time of registration for each enrolled student for the purposes of providing student governmental affairs representatives the means to state their positions and viewpoints before the City, County, District, State, and Federal governments as well as other public agencies. One dollar (\$1) will go to Associated Students to fund advocacy efforts to Federal, State, and Local governments for student leaders and student representatives on behalf of Fullerton College students. The second one dollar (\$1) will go directly to the Student Senate for California Community Colleges (SSCCC), an organization of state legislators and representatives, including the Board of Governors, and Associated Students delegates from all of the California community colleges. The SSCCC hosts a general assembly annually and is made up of ten regions with student representatives from all 113 community colleges in the State of California.

## Transportation Fee (OCTA Pass Program)

Fullerton College students ride the OCTA for a discounted fee. Ride the OC Bus to school, work, shopping, the beach—wherever and whenever you want. Associated Students supported this partnership with OCTA to implement the Fullerton College Pass Program.

Full-time students will pay \$5.75 and part-time students will pay \$5.00 for the entire semester. If a student were to pay market value for an OCTA bus pass, it would cost \$46 per month and \$184 for a semester.

## Veterans Fees

For the purposes of Title 38, Public Law 115-407, any student utilizing Chapter 31 (Vocational Rehabilitation) and Chapter 33 (Post-9/11 GI Bill®) at Fullerton College is not charged late fees, upfront fees, nor is registration withheld for any tuition and fees covered by the Veterans Administration (VA).

## Transcripts

### High School Transcripts

All matriculated students should have official transcripts sent to the Counseling Department from their high schools.

### Other College Transcripts

Students with previous college units should have official transcripts from all colleges attended sent to the Fullerton College Admissions and Records Office. These transcripts can verify completion of prerequisite courses, eliminating the necessity of taking all or part of the placement test, and can assist the academic counselors in working with the students. Official transcripts from other colleges are required for evaluation toward a certificate, associate degree, or meeting general education requirements for transfer. Copies of transcripts from other colleges must be requested from each institution.

### Fullerton College Transcripts

The Admissions & Records Office permanently retains a record of each student's academic work. Only coursework taken at Fullerton College will be shown on the transcript. Transfer credits are included only if other college coursework has been used to fulfill graduation requirements.

Transcripts may be requested online for detailed information on transcript ordering, go to [www.admissions.fullcoll.edu](http://www.admissions.fullcoll.edu) (<http://admissions.fullcoll.edu>) (<http://admissions.fullcoll.edu>). Fax, phone, and email requests are not accepted.

**General Education (GE) Certification** - Students are given the option to request that their official Fullerton College transcript include a GE Certification. For more information regarding GE requirements for four-year universities and colleges refer to <https://catalog.nocccd.edu/fullerton-college/general-education-breadth-requirements-college-university/>. No rush requests are available for this service.

Students are highly encouraged to verify that all grade changes, academic renewal, course repeat adjustment requests, and certificate/degree postings are complete prior to requesting a transcript.

### Transcript Fees

All transcript fees are payable at the time the transcript request is submitted. Fees are \$5 per copy, on demand/rush transcripts are \$10 plus the transcript fee. Please be advised that ALL fees are subject to change without notice to the student. Each student is entitled to two (2) academic transcripts without charge. For more information regarding transcript online ordering visit <https://admissions.fullcoll.edu/transcripts> (<https://admissions.fullcoll.edu/transcripts/>).

## Family Educational Rights and Privacy Act of 1974 (FERPA)

In accordance with the **Family Educational Rights and Privacy Act of 1974 (FERPA)**, records may not be released to a third party without prior written authorization of the student. Contact Admissions and Records for more information. A picture ID of the student or authorized person is required for ALL transactions made in person.

## Verification of Student Status

Fullerton College has partnered with the National Student Clearinghouse to provide Degree and Enrollment Verification of past and present Fullerton College students. This self service is free of charge for students and may be obtained immediately online by logging into myGateway.

In some cases, a verification form must be completed by the Admissions & Records Office, a fee of \$3 per copy will be charged. Regular processing time is 10 business days PLUS mailing time (if applicable). Rush requests are an additional \$10 and processed between 24-48 hours PLUS mailing time (if applicable). Please be advised that ALL fees are subject to change without notice to the student. Please visit <https://admissions.fullcoll.edu/downloadable-forms/> to submit the online verification request form.

Third-party verifications may be obtained through [www.studentclearinghouse.org](http://www.studentclearinghouse.org) (<http://www.studentclearinghouse.org/>). For third party fee information, refer to the National Student Clearinghouse website.

## Catalog Archives

2019-2020 Catalog (<https://catalog.nocccd.edu/archive/2019-2020/fullerton-college/>)  
 2018-2019 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2019/05/FC2018-19Catalog\\_ACCESSIBLE\\_5-20-19.pdf](https://www.fullcoll.edu/wp-content/uploads/2019/05/FC2018-19Catalog_ACCESSIBLE_5-20-19.pdf))  
 2017-2018 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/12/FC2017-18Catalog\\_ACCESSIBLE\\_12-10-18-5.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/12/FC2017-18Catalog_ACCESSIBLE_12-10-18-5.pdf))  
 2016-2017 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog\\_2016-17\\_3-26-18.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog_2016-17_3-26-18.pdf))  
 2015-2016 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog\\_2015-16\\_3-26-18-clean.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog_2015-16_3-26-18-clean.pdf))  
 2014-2015 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog\\_2014-15\\_3-26-18-clean.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog_2014-15_3-26-18-clean.pdf))  
 2013-2014 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog2013-14\\_1-30-2015.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonCollegeCatalog2013-14_1-30-2015.pdf))  
 2012-2013 Catalog (<https://www.fullcoll.edu/wp-content/uploads/2018/07/FullertonOnlineCatalog2012v2.pdf>)  
 2011-2012 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/07/Full\\_FC\\_Catalog\\_11.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/07/Full_FC_Catalog_11.pdf))  
 2010-2011 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/07/FC\\_Catalog\\_2010-11\\_i2rev.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/07/FC_Catalog_2010-11_i2rev.pdf))  
 2009-2010 Catalog (<https://www.fullcoll.edu/wp-content/uploads/2018/07/FCOnlineCatalog2009-10.pdf>)  
 2008-2009 Catalog (<https://www.fullcoll.edu/wp-content/uploads/2018/07/FCOnlineCatalog2008-09.pdf>)  
 2007-2008 Catalog ([https://www.fullcoll.edu/wp-content/uploads/2018/07/FCOnlineCatalog2007-08\\_0.pdf](https://www.fullcoll.edu/wp-content/uploads/2018/07/FCOnlineCatalog2007-08_0.pdf))  
 2006-2007 Catalog (<https://www.fullcoll.edu/wp-content/uploads/2018/07/FCOnlineCatalog2006-07.pdf>)  
 2005-2006 Catalog (<https://www.fullcoll.edu/wp-content/uploads/2018/07/FCOnlineCatalog2005-06.pdf>)  
 2004-2005 Catalog (<https://www.fullcoll.edu/wp-content/uploads/2018/07/FCOnlineCatalog2004-05-w-covers.pdf>)

## College Policies and Rules

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- Academic Honesty (p. 55)
- Academic Renewal Policy (p. 55)
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## Academic Freedom

(This represents Board Policy AP4030, adopted 2/12/08)

The Association of American Colleges and the American Association of University Professors have long recognized that membership in the academic profession carries with it special responsibilities. The protections provided under this section are correlative with certain duties. Academic freedom must be balanced with the obligation of the District to protect the right of students to learn in an environment characterized by civility, open inquiry, and rigorous attention to the search for the truth, free of unlawful discrimination.

It is recognized that an essential function of education is a probing of opinions and an exploration of ideas that may cause some students discomfort. The District affirms the use of a variety of teaching methodologies to fulfill its obligation to raise difficult and meaningful questions in the educational development of students in curricular and co-curricular settings. Faculty members are entitled to freely discuss issues germane to their subject matter as measured by professional standards set by the community of scholars. This freedom involves the right to introduce controversial topics, as long as the manner of presentation involves objective reasoning and rational discussion. There shall be no curtailment of faculty presentation of factual or theoretical material relating to all points of view.

Faculty are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline. However, when doing so, they should apply the best standards of their professions and make every effort to indicate they are not speaking for the institution.

The District will consult with discipline faculty chosen by the Academic/Faculty Senate with respect to contemporary practices and professional standards for course content and delivery when evaluating issues of academic freedom.

## Academic Honesty

Students are expected to abide by ethical standards in preparing and presenting material which demonstrates their level of knowledge and which is used to determine grades. Such standards are founded on basic concepts of integrity and honesty. These include, but are not limited to, the following areas:

1. Students shall not plagiarize, which is defined as
  - a. stealing or passing off as one's own the ideas or words of another, or
  - b. using a creative production without crediting the source.
  - c. The following cases constitute plagiarism:
    - paraphrasing published material without acknowledging the source,
    - making significant use of an idea or a particular arrangement of ideas, e.g., outlines,
    - writing a paper after consultation with persons who provide suitable ideas and incorporating these ideas into the paper without acknowledgment, or
    - submitting under one's own name term papers or other reports which have been prepared by others.
2. Students shall not cheat, which is defined as
  - a. using notes, aids, or the help of other students on tests or exams in ways other than those expressly permitted by the instructor, or
  - b. misreporting or altering the data in laboratory or research projects involving the collection of data.
3. Students shall not furnish materials or information in order to enable another student to plagiarize or cheat.

Instructors may deal with academic dishonesty in one or more of the following ways:

1. Assign an appropriate academic penalty such as an oral reprimand or point reduction.
2. Assign an "F" on all or part of a particular paper, project, or exam.
3. Report to the appropriate administrators, with notification of same to the student(s), for disciplinary action by the College. Such a report will be accompanied by supporting evidence and documentation.

See Student Conduct (p. 59) for additional information.

## Academic Renewal Policy

The Academic Renewal Procedure (51318, California Administrative Code) permits the alleviation of a student's previously-recorded substandard academic performance which is not reflective of the student's present demonstrated ability and level of performance. As a consequence, Academic Renewal may gain for students the benefits of their current level of ability and performance and not permanently penalize them for poor performance in the past.

Therefore, within the regulations listed, Fullerton College may disregard particular previously recorded substandard work from a student's cumulative grade point average.

### PROCEDURES

The regulations and criteria for course alleviation are as follows:

- The maximum number of units that may be alleviated is 24 units. **Only** units taken at Fullerton College may be alleviated, **not** units from other colleges.
- **Only** substandard grades (D, F, NC, NP) can be alleviated.
- A minimum of twelve (12) units must be completed at any accredited college or university with a grade point average of 2.50 in all units **since** the last semester of the requested renewal.
- A minimum of 12 months must have elapsed since the most recent coursework to be alleviated was recorded.
- Students **must** submit transcripts from **all** colleges/universities attended.
- Courses that are appropriate for repetition may be exempt from consideration for alleviation.
- Courses used in awarding an Associate Degree or General Education Certification cannot be alleviated.
- A student may be granted academic renewal only once and it is **irreversible once posted to the transcript**.
- Academic renewal by Fullerton College does not guarantee that other institutions outside the district will approve such action. This determination will be made by the respective transfer institutions.

## Application for Academic Renewal

To apply for Academic Renewal, students must complete the petition form in the Admissions and Records Office. Official transcripts of all academic work (from all accredited schools) must be on file in the Admissions and Records Office at the time of request for Academic Renewal.

## Recording of Academic Renewal

When academic work is alleviated, grades are not removed. They are noted and subtracted from the grade point average. All entries remain legible so that a true and complete record is maintained. There is no assurance that alleviated courses will be treated similarly by other educational institutions outside the District.

## Children on Campus

Children are not allowed on campus unless supervised by a parent or guardian. Children may not attend classes or computer labs (unless the course is specifically designed to include children). Children must be supervised so educational activities are not interrupted and may not be left unattended in common areas such as the library, student center, food services area, quad or college parking lots.

## Drug-Free Environment

It is the policy of the North Orange County Community College District to maintain a drug-free educational, employment, and business environment. The unlawful manufacture, distribution, dispensing, possession, or use of alcohol or any controlled substance is prohibited on District property during District-sponsored field trips, activities, or workshops, and in any facility or vehicle operated by the District. Any student who violates this policy will be subject to disciplinary action, which may include suspension, expulsion, and referral for prosecution. Information regarding the District's Drug-Free Environment Policy may be obtained by contacting the campus Office of the Vice President (714) 992-7074 or the Office of the District Director of Human Resources at (714) 808-4822.

## Compliance for Employees

The District intends to make every effort to provide and maintain a drug-free workplace. Pursuant to the Drug-Free Schools and Communities Act Amendments of 1989, it is unlawful to manufacture, distribute, dispense, possess, use or sell illicit drugs and alcohol in all buildings, property, facilities, service areas and satellite centers of the district. Any employee violating this policy will be subject to disciplinary action, which may include termination. Any employee convicted under a criminal drug and/or alcohol statute for conduct in the workplace or while on District business must report this conviction within five (5) calendar days to the Vice Chancellor, Human Resources.

## Compliance for Students

The District intends to make every effort to provide and maintain a drug-free campus. Pursuant to the Drug-Free Schools and Communities Act Amendments of 1989, it is unlawful to manufacture, distribute, dispense, possess, use or sell illicit drugs and alcohol in all buildings, property, facilities, service areas and satellite centers of the District. All students are required to comply with this policy as a condition of their continued enrollment. Any student violating this policy will be subject to disciplinary action, including suspension, and up to expulsion.

Legal Sanctions Under Federal, State and Local Laws are available in the following locations:

1. Student Activities Office, Building 200, Room 223
2. Campus Safety Department, 1500 Building

## Alcohol/Drug Abuse Counseling, Treatment, Rehabilitation Information

Referral information and Social Service Directories for Orange, Los Angeles, and San Bernardino Counties are available for students in the College's Student Health Center.

## Electronic Devices

The use of radios, electronic recording devices, CD players, iPods, or MP3 players without headphones is prohibited on campus except in connection with approved campus/classroom activities. NOTE: Electronic recording devices may only be used in classrooms with the permission of the instructor, or as an approved educational accommodation through Disability Support Services.

## Grade Change and Appeal Process

The College recognizes the legal right of faculty to set standards of performance and to apply them to individual students. Therefore, the instructor is the final authority in determining grades that are assigned to students and that appear in their permanent academic records. Students have a right to inquire how their grade was determined. Students have the right to have someone accompany them throughout the process. The following procedures apply to changes of grades except for changes of Incomplete (I) and Withdrawal (W) grades.

1. In general, all course grades are final when filed by the instructor. Students have access to view their final grades on myGateway after the course ends. These grades become a part of the student's official record.
2. Students have the right to formally appeal the final grade in a course. Students have the right to have someone accompany them



throughout the process. As per *California Education Code Section 476224(a)*, when grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistakes, fraud, bad faith, or incompetency, shall be final. Appeals are limited to situations in which the student believes the grade is prejudicially, capriciously, or arbitrarily assigned.

3. A request for grade change should be initiated by the student within the next regular semester, but no later than two years, following the award of the original grade.
4. If the instructor determines that there is a valid basis for the change, a Request for Grade Change form shall be completed by the instructor in the Office of Admissions and Records.
5. If the instructor determines there is not a valid basis for the change and denies the student's request, the student may proceed to the appeals process.

Appeal form must be directed to the instructor of the course and a signed copy maintained by student. If further action is necessary, the student should present the written complaint to the Division Dean, and if necessary, the Vice President of Instruction. (Students are referred to the college's Student Complaint Procedures as stated in the catalog and available at division offices.) Once the grade appeal request has entered the formal process, it cannot be resolved informally.

## Nondiscrimination Statement

The policy of the North Orange County Community College District is to provide an educational, employment, and business environment, including but not limited to, access to its services, classes, and programs in which no person shall be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination on the basis of ethnic group identification, national origin, religion, age, sex, gender, gender identification, gender expression, race, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, or military and veteran status, or as otherwise prohibited by state and federal statutes, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics in any program or activity of the District that is administered by, directly funded by, or that receives any financial assistance from the Chancellor or Board of Governors of the California Community Colleges. Discrimination on the basis of sex or gender also includes sexual harassment.

The following person is designated by the North Orange County Community College District as the Responsible Officer/Section 504 and Title IX Coordinator for receiving and coordinating the investigation of all unlawful discrimination complaints filed pursuant to section 59328 of Title 5 of the California Code of Regulations, and for coordinating compliance with Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, Title IX of the Education Amendments of 1992, and response to discrimination complaints related thereto:

Name	Irma Ramos
Position	Vice Chancellor, Human Resources
Address	1830 W. Romneya Drive Anaheim, CA 92801-1819
Telephone	(714) 808-4826

Students and employees who believe they have been subjected to unlawful discrimination, including sexual harassment, or who seek information regarding the District's Unlawful Discrimination Policy should contact the Office of the Vice Chancellor, Human Resources.

## Victims of Sexual Assault

Students who are victims of sexual assault occurring on District property or on an off-campus site or facility maintained by the District, or who seek information or assistance regarding a sexual assault, should contact the campus Director of Health Services at (714) 992-7093 or the Director of Campus Safety at (714) 992-7080. Except as may otherwise be required by law, all inquiries will be maintained in confidence. Victims of sexual assault should immediately report the incident to the Campus Safety Department, Fullerton Police Department and the Title IX officer. The Title IX Office for the campus is the Vice President of Student Services (714) 992-7074. The Title IX Officer for the District is the Director of Human Resources (714) 808-4822.

## Prohibition of Harassment

The policy of the North Orange County Community College District is to provide an educational, employment, and business environment including but not limited to access to its services, classes, and programs in which no person shall be subjected to unlawful harassment and where such environment is free from unwelcome sexual advances, requests for sexual favors, sexual favoritism, or other verbal or physical conduct or communications constituting sexual harassment. It shall also be free of other unlawful harassment, including but not limited to harassment that is based on: race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation, military and veteran status of any person, or because he or she is perceived to have one or more of the foregoing characteristics. Students and employees who believe they have been harassed or retaliated against in violation of this policy should immediately report such incidents by following the procedures described in Administrative Procedure 3410, Unlawful Discrimination.

The following person is designated by the North Orange County Community College District as the Responsible Officer for receiving and coordinating the investigation of all unlawful discrimination complaints, including sexual harassment:

Name	Irma Ramos
Position	Vice Chancellor, Human Resources
Address	1830 W. Romneya Drive Anaheim, CA 92801-1819
Telephone	(714) 808-4826

## Parking

All vehicles parking on campus must display a current parking permit or daily park-ur-self receipt on the lower driver side windshield facing outward with the number of the permit clearly visible. Daily parking permits are available from the yellow vending machines available in designated parking lots or the Campus Safety Office.

Do not park in carpool parking spaces or specially reserved parking spaces. Students are encouraged to use alternate transportation methods such as walking, bicycles, carpooling, or public transportation to reduce parking

congestion and pollution and to help conserve energy. Skateboarding, skating and bike riding are **prohibited** on campus grounds.

## Medical Parking

Students should purchase their parking permit at the time of registration. Students can go to the Campus Safety Office (1500 Bldg) and pick up a Verification for Temporary Medical Parking form to take to their medical provider and have it filled out. Students then bring that completed form to the Campus Safety Office along with their student parking permit. The student parking permit will then be exchanged for a medical parking pass that is good for only **one** semester and will allow them to park in **staff** lots (not handicap parking stalls).

Further parking information is available by contacting the Campus Safety Department at (714) 992-7080 ext. 0 or visiting Campus Safety.

## Petitions and Appeals

Petitions for extenuating circumstances and general appeals that relate to policies on admissions, readmission after academic dismissal, graduation requirements, grades and credit, repetition of courses, academic renewal, or withdrawals, etc., should be directed to the Admissions and Records Office. The Academic Standards Committee convenes monthly to review petitions.

## Probation and Dismissal Policy

In accordance with State regulations, the following probation and dismissal policy has been established. The primary purpose is to assure that a student is making progress toward an educational objective and to alert the student and the student's counselor to the possible need for additional counseling and/or special services.

### What is Academic and Progress Probation?

**Academic Probation** - Students will be placed on academic probation if they have less than a cumulative 2.0 GPA after having attempted 12 or more cumulative units. Students will be removed from academic probation when their cumulative GPA is 2.0 or higher.

**Progress Probation** - Students are placed on progress probation after having attempted 12 or more cumulative units and "W", "NC", "NP" and incompletes reach or exceed half the cumulative units attempted. Students will be removed from progress probation when the cumulative number of "W", "NC", "NP" and incompletes recorded is less than half the cumulative units attempted.

### Consequences of Probation

- Suspension of Financial Aid
- Sequential classes with substandard grades must be repeated. For example, if students do not pass ENGL 100 F, they must repeat this course before they can take the next English course.
- Added expenses for repeating classes to raise GPA
- Graduation and/or transfer delays or complications

### Dismissal

Students may be dismissed for academic or progress probation if they are on probation for more than two consecutive semesters.

**Academic Dismissal** - A student who has been placed on academic probation and earned a cumulative grade point average of less than 2.0 in two consecutive semesters will be subject to scholastic dismissal.

**Progress Dismissal** - A student who has been placed on progress probation for two consecutive semesters shall be subject to scholastic dismissal.

### Consequences of Academic and Progress Dismissal

- Students will not be able to register for classes until they submit a Petition for Readmission and are approved.
- If approved for readmission, students may be limited to 12 units or less per semester.
- Scholastic dismissal will be permanently noted on the student's transcript.
- Suspension of Financial Aid
- Sequential classes with substandard grades must be repeated. For example, if students do not pass ENGL 100 F, they must repeat this course before they can take the next English Course.
- Added expenses for repeating classes to raise GPA
- Graduation and/or transfer delays or complications

### Petition for Readmission After Dismissal

If a student has been dismissed, they may petition for re-admission on a conditional basis with the Admissions and Records Office. Students must present positive evidence of a serious intent to succeed and have a realistic academic goal identified. If the petition is granted, students will be admitted on either academic or progress probation, but with enrollment limitations. Steps for readmission:

- It is strongly recommend that students meet with a counselor to discuss their past and future academic performance.
- Students should complete the Petition for Re-admission with a written explanation and tell us how they will correct past poor academic performance.
  - The form is located here: <https://admissions.fullcoll.edu/downloadable-forms/>
  - After the petition is reviewed by the Academic Standards Committee, the student will be notified by email.

### Strategies for Getting Off Academic Probation

Here are a few basic strategies a student can use to get off of probation.

- **Ask for Help** - Counselors, faculty, staff, and others are all available to help students succeed.
- **Students should clean up their transcript!** - Retaking classes with D or F grades is the quickest way to improve a student's GPA and get off of probation. A "C" or higher grade may substitute any previous substandard grades. Students who are on progress probation should finish more than 50% of their units each semester to avoid dismissal. If students must, they should drop classes during the first two weeks of the Spring/Fall semesters so that a "W" is not recorded.
- **Take less units!** - Students should reduce their course unit load to devote more free time to each course, especially if they have work or family obligations. Students should remember that rushing to fulfill

their educational goal may result in having to repeat courses, wasting time and money.

- **Make an Educational Plan** - Students should talk to a counselor to make sure they are on track.
- **Take a counseling course such as COUN 151 F.**
- **Practice effective learning strategies/study skills.**
- **Use campus resources** - Students should talk to their professors and consider in-person or online tutoring if they are having trouble. Students should consider utilizing our library if studying at home is too distracting. Find a job on campus if possible.
- **Drop classes before the deadlines.** Students should check their schedule after they drop. Students should not assume a professor will drop them.

## Smoking on Campus

Fullerton College is a smoke-free campus. (NOCCCD AP 3570, based on Government Code 7697)

## Standards of Student Conduct and Discipline Policy

The standards of student conduct and disciplinary action for violation of Board Policy 5500 were approved by the NOCCCD Board on January 28, 2003, with the last revision approved October 25, 2016, to be in compliance with Sections 66300, and 66301 of the State Education Code and ACCJC Accreditation Standards.

### • 1.0 Standards of Student Conduct

For purposes of this policy, the term "District" as used herein means the North Orange County Community College District, Cypress College, Fullerton College, North Orange Continuing Education, the Anaheim Campus, and other entities operated by, or property under the control of, the North Orange County Community College District.

Students enrolling in the programs and services of the North Orange County Community College District assume an obligation to conduct themselves in a manner compatible with the function of the colleges and the School of Continuing Education as educational institutions. A student who violates the standards of student conduct shall be subject to disciplinary action including, but not limited to, the removal, suspension or expulsion of the student. Misconduct, which constitutes "good cause" for disciplinary action includes, but is not limited to, the following:

- 1.1 Disruptive behavior, willful disobedience, habitual profanity or vulgarity, the open and persistent defiance of the authority of, or persistent abuse of, District personnel, or violating the rights of other students.
- 1.2 Failure to identify oneself when requested to do so by District officials acting in the performance of their duties.
- 1.3 Cheating, plagiarism in connection with an academic program (including plagiarism in a student publication), or engaging in other academic dishonesty.
- 1.4 Dishonesty, forgery, alteration, or misuse of District documents, records, or identification, or knowingly furnishing false information to the District.
- 1.5 Misrepresentation of oneself or of an organization to be an agent of the District.

- 1.6 Causing, attempting to cause, or threatening to cause physical injury or physical or verbal abuse or any threat of force or violence, to the person, property, or family of any member of the college community, whether on or off District property as defined above.
- 1.7 Willful misconduct which results in injury or death to a student or to District personnel, or which results in the cutting, defacing, or other damage to any real or personal property of the District.
- 1.8 Unauthorized entry into, unauthorized use of, or misuse of property of the District.
- 1.9 Stealing or attempting to steal District property or private property on District premises, or knowingly receiving stolen District property or stolen private property on District premises.
- 1.10 Causing or attempting to cause damage to District property, or to private property on District premises.
- 1.11 Unlawful use, sale, possession, offer to sell, furnishing, or being under the influence of any controlled substance listed in the California Health and Safety Code, section 11053 et seq., an alcoholic beverage, or an intoxicant of any kind, or any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code or other State law defining controlled substance while on District property, or at a District function; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in the California Health and Safety Code, section 11014.5.
- 1.12 Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the District.
- 1.13 Possession, sale, use, or otherwise furnishing of explosives, dangerous chemicals, deadly weapons or other dangerous object including, but not limited to, any facsimile firearm, knife or explosive on District property, or at a District function, without prior written authorization of the Chancellor, college president, School of Continuing Education Provost, or authorized designee.
- 1.14 Engaging in lewd, indecent, or obscene behavior on District property, or at a District function.
- 1.15 Violation of municipal, state, or federal laws in connection with attendance in programs or services offered by the District, or while on District property or at District-sponsored activities.
- 1.16 Soliciting or assisting another to do any act (including the purchasing, transporting or consumption of any controlled substance), while under the supervision of a District official, which would subject a student to expulsion, suspension, probation, or other discipline pursuant to this policy.
- 1.17 Attempting any act constituting cause for disciplinary action as identified in the above sections of this policy.
- 1.18 Sexual assault or sexual exploitation regardless of the victim's affiliation with the District.
- 1.19 Committing sexual harassment as defined by law or by District policies and procedures.
- 1.20 Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law.
- 1.21 Engaging in physical or verbal intimidation or harassment of such severity or pervasiveness as to have the purpose or effect of unreasonably interfering with a student's

academic performance, or District employee's work performance, or of creating an intimidating, hostile or offensive educational or work environment.

- 1.22 Engaging in physical or verbal disruption of instructional or student services activities, administrative procedures, public service functions, authorized curricular or co-curricular activities or prevention of authorized guests from carrying out the purpose for which they are on District property.
- 1.23 Stalking, defined as a pattern of conduct by a student with intent to follow, alarm, or harass another person, and which causes that person to reasonably fear for his or her safety, and where the student has persisted in the pattern of conduct after the person has demanded that the student cease the pattern of conduct. Violation of a restraining order shall, without more, constitute stalking under this policy.
- 1.24 Persistent, serious misconduct where other means of correction have failed to bring about proper conduct or where the presence of the student causes a continuing danger to the physical safety of students or others.
- 1.25 Engaging in expression which is obscene, libelous, or slanderous according to current legal standards, or which so incites students as to create a clear and present danger of the commission of unlawful acts on District property, or the violation of the lawful administrative procedures of the District or the substantial disruption of the orderly operation of the District.
- 1.26 Use of the District's computer systems or electronic communication systems and services for any purpose prohibited by Administrative Procedure 3720, Computer & Electronic Communication Systems, or for any act constituting cause for disciplinary action as provided in this policy.
- 2.0 No student shall be suspended from a college or School of Continuing Education program or expelled unless the conduct for which the student is disciplined is related to college, School of Continuing Education or District activity or attendance.
- 3.0 Any violation of law, ordinance, regulation or rule regulating, or pertaining to, the parking of vehicles, shall not be cause for removal, suspension, or expulsion of a student.
- 4.0 The Chancellor shall establish procedures for the imposition of discipline on students in accordance with the requirements for due process of law. The procedures shall identify potential disciplinary actions including, but not limited to, the removal, suspension or expulsion of a student.
- 5.0 The Chancellor shall establish procedures by which all students are informed of the rules and regulations governing student behavior.

Furthermore, no student shall be suspended from a college or School of Continuing Education program or expelled unless the conduct for which the student is disciplined is related to college, School of Continuing Education or District activity or attendance. Any violation of law, ordinance, regulation or rule regulating, or pertaining to, the parking of vehicles, shall not be cause for removal, suspension, or expulsion of a student.

The Chancellor shall establish procedures for the imposition of discipline on students in accordance with the requirements for due process of law. The procedures shall identify potential disciplinary actions including, but not limited to, the removal, suspension or expulsion of a student.

The Chancellor shall establish procedures by which all students are informed of the rules and regulations governing student behavior.

## Summary Suspension

When serious violations of college regulation or procedures occur as a result of inappropriate student conduct, the college shall take immediate action (summary suspension) to resolve the problem. The action may occur as follows:

1. **Removal from Class** — the involuntary removal of a student from class by an instructor for a maximum period of two consecutive class sessions.
2. **Removal from Facility** — the involuntary removal of a student by an administrator from a District or College facility, or facility under the control of the District or College for a maximum period of two consecutive days.
3. **Withdrawal of Consent to Remain on Campus** — withdrawal of consent by the President or the President's designee for a student or other person to remain on a College campus in accordance with California Penal Code section 626.4 where the College President has reasonable cause to believe that the student has willfully disrupted the orderly operation of the campus.

## Definitions

1. **Expulsion** — The involuntary removal of a student from the District and all District programs for one or more terms, or permanently, by action of the Board of Trustees.
2. **Formal Hearing** — A hearing conducted before a hearing officer or hearing panel in accordance with administrative procedures during which the student and the District may call and examine witnesses and present documentary evidence.
3. **Formal Complaint** — This procedure is recommended for general serious or ongoing complaints or concerns regarding Fullerton College faculty, staff, services, instruction and/or classes. Any and all should be addressed as soon as the issue arises. Grade appeals follow the Grade Appeal Process (p. 56). The student should refer to the Fullerton College Catalog for the specific processes for these exceptions: student-to-student conduct (p. 59), grade appeal (p. 56) and sexual harassment (p. 57).
4. **Informal Hearing** — A meeting between the student and the Student Discipline Officer or designee in accordance with administrative procedures to discuss the charges and provide the student with the opportunity to respond to the charges orally, or in writing.
5. **Informal Complaint** — Informal concerns of a non-serious nature may be reported to the appropriate Dean. Such complaints will be reviewed and considered; however, no formal response will be provided.
6. **Suspension** — The involuntary removal of a student for good cause from one or more classes or from the college by the President or designee for a limited period of time, which can be short-term or long-term suspension (up to ten consecutive days).
7. **Removal from Class** — The involuntary removal of a student from class by an Instructor for a maximum period of two consecutive class sessions.
8. **Removal from Facility** — The involuntary removal of a student by an administrator from a District or College facility, or facility under the control of the District or College, for a maximum period of two consecutive days.
9. **Disciplinary Probation** — A status between good standing and suspension or expulsion. It covers a stated trial period and disciplinary conditions required of the student. At the end of the

trial period, it shall be determined, based on whether or not the probationary conditions have been met, if the student is to be returned to good standing, suspended, recommended for expulsion, or subject to other disciplinary action.

10. **Loss of Privileges** – Disciplinary action involving the loss of certain student privileges, such as eligibility to participate in extracurricular activities, for a stated period of time.
11. **Formal Reprimand** – Written admonition or warning to cease and desist from conduct that has been determined to violate the standards of student conduct. A formal reprimand becomes part of a student's permanent record and is considered in the event of future violations of the standards of student conduct.
12. **Informal Reprimand** – An oral admonition or warning to cease and desist from conduct that has been determined to violate the standards of student conduct. A record of the fact that an informal reprimand has been issued may be retained as part of a student's record for a period of up to one year and is considered in the event of future violations of the standards of student conduct during the period of retention. It is the student's responsibility to request that the record be removed upon expiration of the period of retention.
13. **Withdrawal of Consent to Remain on Campus** – Withdrawal of consent by the President or the President's designee for a student or other person to remain on a College campus in accordance with California Penal Code section 626.4 where the College President has reasonable cause to believe that the student has willfully disrupted the orderly operation of the campus.

## Student Complaint Process

### Informal

The student shall resolve the issue directly with the faculty or staff member directly involved. Students who are uncomfortable speaking to the faculty or staff member have the right to have someone accompany them throughout the process.

### Formal

1. It is the student's responsibility to initiate the formal complaint process. The college has a legal responsibility to deal directly with the student. The designated complaint forms will be available in division offices.
2. The student should contact the appropriate division/area office to initiate the formal complaint process. A signed complaint form should be addressed to the Dean or Director of the division/area.
3. If the student feels the issue is not resolved at the division/area level, or if the complaint concerns the Dean or Director, the student can ultimately contact Fullerton College's Vice President of Student Services or the Vice President of Instruction. Both offices are located on the first floor of Building 100.
4. The student will be notified in writing after each formal step using the designated student complaint form.

## Student Right-to-Know Act

Student Right-to-Know (SRTK) is a federally-mandated public disclosure of specific college-related information, as per the U.S. Code of Federal Regulations (CFR): Title 34 – Part 668. The following highlights are subsections of the two basic laws that mandate specific college information:

## CFR: Title 34 – Part 668.46: Information on Completion or Graduation Rates

The college completion rates or graduation rates (including transfer rates and student athlete rates – Part 668.49) will be made accessible to the public. The rates are derived from yearly IPEDS – Graduation Rate Survey submissions and are currently coordinated through the California Community College Chancellor's Office under the terms of the "Student Right-to-Know Subscription Agreement." SRTK rates are based upon approximately three percent (3%) of the student population.

## Publication Requirements

It is mandatory that the statistics for completion and graduation rates and crime activities are made public by January 1st of each year (unless otherwise indicated) to all current and prospective students and high school counselors in the areas of admissions, literature, brochures, catalogs, and websites, or anytime a student enters into a financial obligation with a school (excluding application fees). Data on remedial instruction, job and training programs, retention of student and graduation and completion rates are available through a link on the Fullerton College website (<http://scorecard.cccco.edu/scorecardrates.aspx?collegeID=862>) to the California Community Colleges Student Success Scorecard.

## Completion and Transfer Rates

Over 1,350 students transfer annually from Fullerton College to UC, CSU or regionally-accredited California independent or out-of-state colleges or universities.

- Fullerton College sends approximately 85-90% of all transfers to California State University campuses. The top CSUs in terms of number of Fullerton College transfers are: Cal State Fullerton, Cal State Long Beach and Cal Poly Pomona
- Fullerton College transfers students statewide. The top UCs in terms of number of Fullerton College transfers are: UC Irvine, UC Los Angeles, UC Riverside and UC Berkeley
- Fullerton College is in the top five California Community Colleges in terms of overall transfers to the University of Southern California (USC).

## Campus Safety Institutional Security Policies and Crime Statistics

### On-Campus

Crimes	2018	2019	2020
Aggravated Assault	0	0	1
Arson	0	0	0
Burglary	3	1	0
Forcible Sex Offenses	0	0	0
Motor Vehicle Theft	1	3	0
Murder/Non-Negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0

Non-Forcible Sex Offenses	0	0	0
Robbery	0	0	0
<b>Disciplinary Referrals</b>			
Violation of Drugs	9	1	0
Violation of Liquor Laws	1	1	0
Violation of Weapons	0	0	0
<b>Special Category Arrest</b>			
Drug Abuse Violations	0	0	0
Hate Crimes	1	0	0
Liquor Law Violations	2	0	1
Weapons Possession	1	0	0
<b>Violation Against Women Act (VAWA)</b>			
Dating Violence	0	0	1
Domestic Violence	1	0	0
Sexual Assault	1	2	0
Stalking	0	2	0

### Public Property

Crimes	2018	2019	2020
Aggravated Assault	0	1	0
Arson	0	0	0
Burglary	0	0	0
Forcible Sex Offenses	0	0	0
Motor Vehicle Theft	0	0	0
Murder/Non-Negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Non-Forcible Sex Offenses	0	0	0
Robbery	0	0	0
• Disciplinary Referrals*			
Violation of Drugs	0	0	0
Violation of Liquor Laws	0	0	0
Violation of Weapons	0	0	0

<b>Special Category Arrest</b>			
Hate Crimes	0	0	0
Drug Abuse Violations	0	0	0
Liquor Law Violations	0	0	0
Weapons Possession	1	0	0
<b>Violation Against Women Act (VAWA)</b>			
Dating Violence	0	0	0
Domestic Violence	0	0	0
Sexual Assault	0	0	0
Stalking	0	0	0

## CFR: Title 34 – Part 668.47: Institutional Security Policies and Crime Statistics

Public Law 101-542: The Higher Education Act of 1965 was amended via the current Student Right-to-Know and Campus Security Act through Public Laws 102-26, 102-208 and 102-325. The regulations require the college to disclose information about campus safety policies and procedures and certain crime statistics.

The Act also requires additional information including security policies. A full text of the security policies can be found on the Campus Safety internet site, <https://campussafety.fullcoll.edu>.

Please refer to the Annual Security Report.

## Safety for the Fullerton College Community

Campus safety and personal safety is everyone's business at Fullerton College. Students, faculty, staff and visitors are partners in creating an atmosphere that is safe and conducive to a positive learning environment.

Fullerton College maintains a Campus Safety Department with officers available 24/7. Individuals are encouraged to report all crimes to the Campus Safety Department in a timely manner. The Campus Safety Department (1500 Bldg, south of the four-story parking structure off Lemon Street) can be reached at (714) 992-7080, ext. 0 for routine business and (714) 992-7777 for emergencies. There are also many emergency phones throughout the campus that will immediately connect any student with a Campus Safety officer.

Fullerton College is a safety department and not a police department. Fullerton College has an MOU with the Fullerton Police Department to investigate all crimes on the Fullerton College campus. The Fullerton Police Department is located at:

237 W. Commonwealth Avenue  
Fullerton, CA 92832  
(714) 738-6700

Students, staff, faculty and visitors are encouraged to report all crime to the Fullerton Police Department.

## Access to Campus Facilities

**BUILDINGS** – Fullerton College Campus Safety officers have the authority to ask persons for identification and determine whether individuals have lawful business at Fullerton College. Most campus buildings are open from 6:30 am to 10:30 pm, Monday through Friday. On weekends, opening of specific buildings is accomplished based upon scheduled use and/or special request.

Individuals who need to be in campus buildings or areas other than during regularly-scheduled work hours should notify the Campus Safety Department of their presence and request access to the building.

Some campus rooms and areas may be protected by intrusion alarms. Before entering such areas, the Campus Safety Department should be called. Campus buildings will normally be locked from 11:00 pm on Friday to 6:30 am on Monday. As previously stated, Campus Safety personnel will unlock doors for weekend classes and other events as published in the Master Calendar located at [www.fullcoll.edu](http://www.fullcoll.edu) (<http://www.fullcoll.edu>) under "Campus Calendar."

**COLLEGE PROPERTY** – No district property may be removed from the campus without expressed written permission from the Division Dean or Area Supervisor. Unauthorized removal of district property from the campus is a violation of the law and may be prosecuted by the District.

## Campus Safety Services

It is the policy of the North Orange County Community College District's Board of Trustees to protect the members of the total college community and to protect the property of Fullerton College. Under the general direction of the Vice President of Administrative Services, the Campus Safety Department shall ensure that reasonable protection is provided by using methods that fit within and contribute to the educational philosophy and process of the institution.

Fullerton College has a formal memorandum of understanding with the Fullerton Police Department to request assistance for incidents that require resources not available at Fullerton College. The college will summon the assistance of other agencies to provide services for incidents that require special resources.

## Crime Prevention

One of the essential ingredients of any successful crime prevention program is an informed public. It is the intent of Fullerton College to inform students and staff, in a timely manner, of any criminal activity or security problems which may pose a reasonable threat to their physical safety. Such information will normally be distributed through various means, such as cell phone alerts, social media alerts, reported on the campus website, student publications, and/or memos or bulletins.

Another critical element of a campus safety program is training. Campus Safety, Student Health Services, and the Student Activities offices sponsor programs on various topics ranging from sexual assault awareness to substance abuse prevention.

Finally, all effective crime prevention programs include some measure of people watching out for one another. All staff and students are asked to be ALERT, SECURITY CONSCIOUS and INVOLVED. To report suspicious behavior, call the Campus Safety Department business line at (714) 992-7080 or emergency line at (714) 992-7777.

## Substance Abuse

In accordance with Public Law 101-226 "Drug-Free Schools and Communities Act Amendment of 1989," the Board of Trustees of the

North Orange County Community College District prohibits the unlawful possession, use, or distribution of illicit drugs and alcohol by students, employees, and the public, on Fullerton College property and as part of any Fullerton College sponsored or sanctioned activity.

Any students or employees in violation of this policy are subject to disciplinary action up to and including expulsion from Fullerton College or termination from employment for violations of the standards of conduct.

The decision to take disciplinary action in any instance rests with the Board of Trustees after consideration of the recommendations of the Fullerton College President.

The possession, use, and sale of alcoholic beverages by anyone on Fullerton College-controlled property is a misdemeanor as per California Business Code 25608 and a violation of the NOCCCD Policies Relating to Students. The use, sale, or possession of any illegal drug is a violation of State law and any person found in violation may be subject to arrest by Federal, State, local or Campus Safety personnel. Criminal prosecution is separate from any administrative discipline that may be imposed by the District.

**For more information, contact:**

### FC Admissions and Records

(714) 992-7075  
2000 Building – 1st Floor

### FC Campus Safety

(714) 992-7080  
1500 Building

### FC Student Activities

(714) 992-7095  
200 Bldg, Room 223

### FC Cadena/Transfer Center

(714) 992-7086  
200 Bldg, Room 212

For a complete Campus Safety Plan and/or more detailed information regarding the Student Right-to-Know and the Jeanne Clery Disclosure, visit the Fullerton College website: [www.fullcoll.edu/](http://www.fullcoll.edu/) (<http://www.fullcoll.edu/>) – at the Student Services drop-down menu, click on Campus Safety/Parking. Once there, click on Student Right-to-Know.

## Withholding Student Records

NOCCCD BOARD POLICY Section 5035 Student Personnel, Withholding Student Records, Adopted 6/14/05

**Probable Cause:** The President, or designee, may place a hold on a former or current student's registration, grades and/or transcripts for a period of no more than three working days for probable cause. In the event that the President, or designee, continues this hold on a student's records, the student must be informed in writing that such a hold is being placed on his/her record and the reason for that hold.

**Financial Obligations:** In accordance with Title 5, Subchapter 7.5, Section 59410, grades, transcripts, diplomas, and registration privileges, or any combination thereof, shall be withheld from any student or former student who has been provided with written notice that he or she has failed to pay a proper financial obligation due to the district or a college. Any item or

items withheld shall be released when the student satisfactorily meets the financial obligation.

The definition of proper financial obligation shall include, but is not limited to: student fees; obligations incurred through the use of facilities, equipment or materials; library fines; unreturned library books; materials remaining improperly in the possession of the student; and/or any other unpaid obligation a student or former student owes to the District. A proper financial obligation does not include any unpaid obligation to a student organization.

A hold may be placed on a student's academic record and subsequent term registration when the student has an outstanding obligation to the college. Once the student satisfies the obligation, the hold will be released.

Students must contact the respective office/department listed below to clear any hold:

Hold Type	Office to Contact
Accounts Receivable	Bursar
Admissions Info Required	Admissions and Records
Bursar's Hold	Bursar
Disciplinary	Student Support Services
Financial Aid	Financial Aid
Foundation	Foundation Office
International Student	International Student Center
Library Materials/Fees	Library
Physical Education	Physical Education
Registrar's Hold	Admissions and Records
Scholastic Dismissal	Admissions and Records
Special Admit Form	Admissions and Records
Transcript	Admissions and Records
Unpaid Balance	Admissions and Records

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## Accounting (ACCT)

**ACCT 001 F Accounting for Small Business****3 Units**

54 hours lecture per term. This course is ideal for the student who wishes to attain a solid foundation in the basic fundamentals of accounting. This includes business students who are planning more advanced studies of accounting and business at four-year institutions, as well as students who desire knowledge in accounting for small businesses, but do not necessarily intend to major in accounting or transfer to a four-year university. Topics include fundamentals of double entry journals; preparation of trial balances; worksheets and simple financial statements for service or retail types of businesses; use of controlling accounts; special journals; cash journals; accrual and cash basis accounting; cash controls and bank reconciliation; payroll accounting including employee earnings and deductions and employer's taxes and payments.

**ACCT 100 F Small Business Accounting****3 Units**

54 hours lecture per term. This course teaches basic accounting as required for a small business. A semester-long practice case gives students the opportunity to input routine transactions and prepares monthly financials for a small business. Topics covered are sales, receivables, uncollectible accounts, payables, inventory, payroll, general ledger, depreciation, cash management, monthly bank reconciliations and financial statement reporting. Students learn how to compute payroll, prepare payroll checks and prepare federal and state payroll reports. Different forms of businesses are reviewed, with emphasis on bookkeeping for a sole proprietorship. (Degree Credit) (CSU)

**ACCT 100AF Financial Accounting Principle****3 Units**

72 hours lecture per term. This course is the first part of a two-part financial accounting course that is equivalent to ACCT 101AF after the completion of ACCT 100AF and ACCT 100BF. This course covers the entire accounting cycle, cash, bank reconciliations, receivables, temporary investments, and incorporates a practical approach with the use of business papers and computer applications integrated into the homework. Not open to students who have completed ACCT 101AF with a grade of C or better. (Degree Credit) (CSU) (UC Credit Limitation)

**ACCT 100BF Financial Accounting Principle****3 Units**

**Prerequisite(s):** ACCT/100A Financial Accounting Principles with a grade of "C" or better.

72 hours lecture per term. This course is a continuation of 100AF Financial Accounting Principles with emphasis on the basic concepts of accounting for plant assets, intangible assets, payroll, notes payable and other liabilities, partnerships and corporations, long term liabilities and investments in bonds, inventories, statement of cash flow, and analysis of financial statements. The practical approach is continued with the use of business papers and computer applications integrated into the homework. Upon completion of this course, the student will have fulfilled the equivalent of ACCT 101AF requirement. Not open to students who have completed ACCT 101AF with a grade of C or better. (Degree Credit) (CSU) (UC Credit Limitation)

**ACCT 101AF Financial Accounting****5 Units**

90 hours lecture per term. This is a study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. This course covers the accounting information system, including recording and reporting business transactions with a focus on the accounting cycle, the application of generally-accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: ACCT 110)

**ACCT 101BF Managerial Accounting****5 Units**

**Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.

90 hours lecture per term. This course is the study of how managers use accounting information in decision making, planning, directing operations and controlling, and focuses on cost terms and concepts, cost behavior, cost structure and cost-volume profit analysis. Topics also include issues relating to cost systems, cost control, profit planning and performance analysis in manufacturing and service environments. (Degree Credit) (CSU) (UC) (C-ID: ACCT 120)

**ACCT 102HF Honors Financial Accounting****5 Units**

90 hours lecture per term. This Honors-enhanced course is a study of the financial information system, examining why it is important and how it is used by investors, creditors and others to make decisions. This course covers the accounting information system, including recording and reporting business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Topics include issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: ACCT 110)

**ACCT 104 F Computerized Accounting****2 Units**

**Prerequisite(s):** ACCT 100AF or ACCT 101AF, with a grade of C or better

27 hours lecture and 27 hours lab per term. This course provides hands-on experience in accounting on a microcomputer. Systems included are the general ledger, accounts receivable and accounts payable, financial statements analysis, depreciation, inventory, and payroll. (Degree Credit) (CSU)

**ACCT 107 F Computerized Accounting with QuickBooks****3 Units**

54 hours lecture per term. This course will introduce students to basic financial record keeping software using the double-entry system for recording transactions. Emphasis will be placed on how to use accounting application software in a small business environment. (Degree Credit) (CSU)

**ACCT 110 F Payroll Accounting****3 Units**

54 hours lecture per term. This course is designed to provide an overview of social security, state and federal payroll taxes. The course is of a non-technical nature and is intended to give business students a practical working knowledge of the current tax laws and actual experience in applying the regulations. (Degree Credit) (CSU)

**ACCT 112 F Income Tax Procedure****3 Units**

54 hours lecture per term. This course offers a simple and non-technical presentation of the information needed in preparing Federal Income Tax returns for individuals whose income is derived from wages and other various sources. Tax deductions and credits are also covered in detail. (Degree Credit) (CSU)

**ACCT 113 F Income Tax Procedure - Business****3 Units**

54 hours lecture per term. This course offers a basic and non-technical presentation of the information needed in preparing Federal Income Tax returns for corporations and partnerships. Tax deductions and credits are also covered in detail. (Degree Credit) (CSU)

**ACCT 201AF Intermediate Accounting****5 Units**

**Prerequisite(s):** ACCT 100BF or ACCT 101AF or ACCT 102 HF, with a grade of C or better.

90 hours lecture per term. This second-year accounting course deals with adjustments, working papers, cash and receivables, inventories, plant and equipment, intangibles, deferred charges, liabilities, income tax allocation and accounting for premiums. This course is required of all vocational accounting majors. (Degree Credit) (CSU)

**ACCT 201BF Intermediate Accounting****5 Units**

**Prerequisite(s):** ACCT 100BF with a grade of "C" or better or ACCT 101AF with a grade of "C" or better or ACCT 102HF with a grade of "C" or better.

90 hours lecture per term. This second-year accounting course deals with earnings per share, revenue recognition, accounting for pensions and other post-employment benefits, accounting changes and error corrections, cash flow statements, the impact of changing prices, and financial statement analysis. This course is required of all vocational Accounting majors. (Degree Credit) (CSU)

**ACCT 202 F Introduction to Cost Accounting****3 Units**

**Prerequisite(s):** ACCT 101BF with a grade of "C" or better

54 hours lecture per term. This course covers the theory of cost accounting including job order costs, estimated costs, standard costs, miscellaneous costs, and distribution cost systems as applied to the control and management of business through cost accounting procedures. This course parallels cost accounting courses in four-year colleges. Required of all vocational accounting majors. (Degree Credit) (CSU)

**ACCT 203 F Auditing****3 Units**

**Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.

54 hours lecture per term. This course emphasizes internal auditing with questions and separate cases. Incorporated into the course is one long case for application of auditing principles. (Degree Credit) (CSU)

**ACCT 204 F Analysis of Financial Statements****3 Units**

**Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.

54 hours lecture per term. This course deals with characteristics of financial statements and financial statement analysis. A study of goals, methods, and tools for analysis is studied. In addition, accounts receivable, inventories, projected statements, cash budgets, and cash flow are studied. Emphasis is placed on financial analysis from a banking viewpoint. (Degree Credit) (CSU)

**ACCT 205 F Ethics in Accounting****3 Units****Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.

This course examines the professional responsibility of ethical behavior in accounting and a study of truth in financial disclosures, ethical theory, code of conduct, auditing, managerial, and tax ethics. This course is now required in order to take the CPA Exam. (Degree Credit) (CSU)

**ACCT 210 F Advanced Accounting****3 Units****Prerequisite(s):** ACCT 201AF with a grade of "C" or better

54 hours lecture per term. This course covers corporate reporting for segments: interim report, accounting for foreign operations, accounting for partnerships, accounting for government entities, not-for-profit entities, estates, and trusts. Also covered are bankruptcies, equity method, consolidated financial statements, and foreign currency transactions. (Degree Credit) (CSU)

**ACCT 220 F Individual Income Tax****4 Units**

72 hours lecture per term. This course is designed to study the federal income tax process, federal income tax laws that apply to individuals, and the application of tax principles to specific problems. Topics include gross income and exclusions, business deductions and itemized deductions, losses, certain tax credits and property transactions. A study is also made of California income tax laws in those areas which differ from federal tax law. This course is certified by the California Tax Education Council (CTEC) as fulfilling the 60-hour qualifying educational requirement imposed by the State of California for becoming a registered tax return preparer. (Degree Credit) (CSU)

**ACCT 221 F Corporate, Partnership, Estate and Trust Tax****3 Units**

54 hours lecture per term. This advanced course examines concepts of business income taxation. This course focuses on fundamental tax concepts, the mastery of which will enable students to incorporate tax factors into business and investment decisions. Content includes basic principles of income taxation as applied to partnerships, estates, and trusts; taxation on transfer of wealth, both during lifetime and testamentary. Computerized tax software used. (Degree Credit) (CSU)

**ACCT 222 F Corporate Taxation****3 Units****Prerequisite(s):** ACCT 220 F with a grade of C or better.

54 hours lecture per term. This advanced course examines the concepts of corporate income taxation. This course focuses on fundamental tax concepts, the mastery of which will enable students to incorporate tax factors into business and investment decisions. Content includes basic principles of income taxation as applied to corporations and business entities elected to be taxed as S-Corporations. Computerized tax software is used. (CSU)

**ACCT 230 F Excel for Accountants****3 Units****Advisory:** CIS 106 F.

54 hours lecture per term. This course is specifically for accounting and finance professionals who have a good grasp of Excel and want to take their skills to the next level. Students will learn about the features they will need to achieve greater efficiency and automation. (Degree Credit) (CSU)

**ACCT 240 F Accounting Information Systems****3 Units****Prerequisite(s):** ACCT 101AF with a grade of "C" or better

54 hours lecture per term. This course explores accounting information systems which applies accounting principles using general ledger and spreadsheet software. Designed to develop employable accounting analysis skills, evaluate and compare commercial software and analyze financial reporting. (Degree Credit) (CSU)

**ACCT 250 F Forensics Accounting****3 Units**

54 hours lecture per term. This course explores the fundamentals and techniques of investigative and forensics accounting. The development of forensic accounting as a discipline and its interaction with business, law, auditing and information systems will be explored. Subjects include financial statement and tax fraud, divorce and bankruptcy, identity theft and various white-collar crimes. Forensics principles necessary to detect, prevent and prosecute financial crimes will be explored. (Degree Credit) (CSU)

**ACCT 295 F Accounting Internship****2-4 Units**

18 hours lecture per term and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in accounting. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

## Administration of Justice (AJ)

**AJ 068 F Parolee Contacts****1.5 Units**

Pass/No Pass option only. 27 hours lecture per term. This course is designed to improve the understanding of state prison parolees. This course covers a basic understanding of the California prison system, typical parolee behavior, communicating with parolees and understanding conditions of parole. It also emphasizes teaching the cognitive skills needed in law enforcement, including proper field interrogation. Investigative recourses within the Department of Corrections are discussed, as well as controlled interviews.

**AJ 069 F Health and Safety 11550 - Drug Influence****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course is designed to improve the police officer's ability to recognize the objective symptoms of drug intoxication, with emphasis placed on the proper application of California Health and Safety Code 11550. The course covers how the peace officer can develop techniques to better identify signs of specific drug ingestion, use proper drug testing methods and write effective reports to aid in successful prosecution.

**AJ 070 F Emergency Management****1.5 Units**

Pass/No Pass only. 27 hours lecture per term. This course is designed to introduce important tactical concepts when planning for natural and technological disasters and other critical incidents that require law enforcement response. It focuses on basic emergency management principles, including disaster preparedness, mitigation, response and recovery. Emphasis is placed on the use of the Standardized Emergency Management (SEMS) and Law Enforcement Incident Command (ICS) Systems.

**AJ 071 F Preventing Racial Profiling****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course is designed to familiarize students with the conceptual and legal issues surrounding the unlawful practice of racial profiling. It examines critical cultural, legal and societal factors that ultimately lead to racial profiling as a discriminatory practice. The course emphasizes the need for the student to develop an understanding and respect for racial and cultural differences. Non-combative methods of carrying out law enforcement duties in a racially and culturally diverse environment are also emphasized.

**AJ 072 F Investigating Domestic Terrorism****1 Unit**

Pass/No Pass only. 18 hours lecture per term. This course is designed to give the student essential background information about domestic terrorism and demonstrate how law enforcement personnel can properly investigate terrorist crimes. An analysis of the historical, legal and political perspective of terrorist activity as well as assessing philosophical and psychological typologies of terrorists. The curriculum emphasizes how law enforcement can develop investigative and intelligence capabilities to counter terrorist activity as a part of American national security policy. (Non-Degree Credit)

**AJ 075 F Cultural Diversity****1 Unit**

Pass/No Pass only. 18 hours lecture per term. This course is designed to give students a perspective of public safety professionals and their relationship to major cultural, racial, and ethnic groups including persons with disabilities as well as gays and lesbians. This course will also examine law enforcement personnel issues that deal with gender, sexual harassment, diversity, affirmative action, and other contemporary challenges.

**AJ 077 F Organized Crime****1 Unit**

Pass/No Pass only. 18 hours lecture per term. This course will analyze the effects of International Organized Crime Groups in the United States and the American law enforcement effort to combat those criminal organizations.

**AJ 078 F Multi-Agency Task Forces****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course will analyze the needs, benefits, and procedures in the establishment of federal, state, and local task forces. Emphasis will be placed on working together in a multi-agency environment and achieving desired outcomes.

**AJ 079 F Law Enforcement Career Preparation****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course will assist the student in identifying and utilizing effective performance strategies toward entry-level law enforcement employment examinations. Emphasis is placed on specific civil service testing procedures, including written exams, physical agility tests, oral board interviews, and the background investigation process.

**AJ 080 F Lifetime Fitness for Law Enforcement****2 Units**

Pass/No Pass only. 36 hours lecture per term. This course is designed to introduce important wellness concepts to law enforcement personnel. Through the use of lecture, group discussion and practical demonstration, this course discusses how those in law enforcement can develop and maintain successful fitness habits and minimize job related stress. The course design emphasizes proper fitness assessment, effective anaerobic/aerobic fitness principles, the prevention of physical disablers through stress reduction, current nutrition guidelines and proper fitness program design. Intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers.

**AJ 084 F Domestic Violence****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course will demonstrate to the student that the intent of the Legislature in domestic violence cases is to stress enforcement of the laws to protect the victim and communicate the attitude that violent behavior is criminal behavior and will not be tolerated. The investigative process, arrest, court protective orders and victim assistance will be stressed.

**AJ 085 F Police Vehicle Pursuits****2 Units**

Pass/No Pass only. 36 hours lecture per term. This examines police pursuits in California and the nation. Specific emphasis is placed on California laws, both criminal and civil, and violators involved in police pursuits will be covered. An analysis of officer and violator behavioral patterns both during and after police pursuits. This course will establish a better understanding of the dynamics and contemporary issues associated with high-speed police chases.

**AJ 089 F Child Abuse and Child Pornography****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course will prepare the student to identify, arrest and investigate child abuse and child pornography crimes.

**AJ 091 F Law Enforcement Instructor Development****2 Units**

Pass/No Pass only. 36 hours lecture per term. This course is designed to assist both current and future law enforcement instructors to maximize their instructional skills and improve the learning process. This course will introduce law enforcement instructors to current adult learning techniques and developing instructional technology. This course is intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers.

**AJ 092 F Crime Scene Investigation****1 Unit**

Pass/No Pass only. 9 hours lecture and 27 hours lab per term. This course will give students the knowledge and practical application to collect and preserve evidence at crime scene. Students will also learn the importance of physical evidence in solving crimes, evidence collecting and processing methods, as well as the use of forensic light source technology.

**AJ 093 F DNA Genetic Fingerprinting****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course will prepare the officer/student to properly handle DNA evidence collection and preservation. An understanding of the fundamentals of DNA and the current techniques of analysis will be presented.

**AJ 095 F Preventing Sexual Harassment****0.5 Units**

Pass/No Pass only. 9 hours lecture per term. This course explores sexual harassment and gender discrimination and looks at ways to prevent this activity in the workplace. It defines basic types of sexual harassment and explains laws prohibiting harassing conduct. This course focuses on how affected personnel can effectively respond when experiencing harassment, and examines the role of management in combating harassing behavior through proper policy development and investigation.

**AJ 100 F Introduction to Criminal Justice (formerly Introduction to Law Enforcement)****3 Units**

54 hours lecture per term. This course provides students with an introduction and overview of the American criminal justice system. This course examines the history, development and philosophy of criminal justice and summarizes fundamental practices found in law enforcement, the courts and corrections in a democratic society. Topics include the purpose of social control, theories of crime causation, the nature of police work, judicial procedures and correctional strategies in the United States. (Degree Credit) (CSU) (UC) (C-ID: AJ 100)

**AJ 110AF Criminal Law****3 Units**

54 hours lecture per term. This course examines the basic principles, concepts and purposes of substantive criminal law. It surveys the historical development of penal law throughout history and examines basic criminal legal concepts, including culpability, defenses, parties to crime, inchoate offenses, and laws of arrest. This course emphasizes how law intersects operational police practices through the study of American constitutional law. (Degree Credit) (CSU) (UC) (C-ID: AJ 120)

**AJ 110BF Advanced Criminal Law****3 Units**

**Corequisite(s):** Completion of or concurrent enrollment in AJ 110AF with a grade of C or better.

54 hours lecture per term. This course is a study of the elements of crimes against persons, property, and the State as they are recognized in the Penal Code and general laws of California. Parties in crime, culpability, and incomplete offenses are presented from the point of view of the peace officer and the courts. This course may be taken together with or after AJ 110AF. (Degree Credit) (CSU) (UC Credit Limitation: AJ 110AF and AJ 110BF combined; maximum credit, one course)

**AJ 135 F Weaponless Defense****1 Unit**

18 hours lecture and 18 hours lab per term. This course provides the student an opportunity to develop proficiency in weaponless defense techniques, controlling combative individuals, and handling passive, uncooperative, or armed-aggressive individuals. This course meets the one-unit physical education activity requirement for graduation. (Degree Credit) (CSU)

**AJ 140 F Juvenile Procedures****3 Units**

54 hours lecture per term. This course is a study of juvenile crime, laws and social issues relating to youthful offenders. Other topics include examination of child abuse, domestic violence and gang membership, law enforcement responses to issues relating to juveniles, including the courts, probation and the California Youth Authority. (Degree Credit) (CSU) (C-ID: AJ 220)

**AJ 151 F Police Report Writing****3 Units**

54 hours lecture per term. This course examines the proper writing of police crime reports and their importance in the successful prosecution of cases. Emphasis is placed on developing the student's ability to accurately take notes, employ appropriate methods of obtaining information from victims, witnesses, and suspects, formulate investigative techniques, and recognize proper report language. (CSU) (Degree Credit)

**AJ 220 F Criminal Procedure****3 Units**

54 hours lecture per term. This course provides an examination and analysis of due process in criminal proceedings from pre-arrest through trial and appeal. This course describes stages of criminal justice process and reviews basic constitutional rights associated with the investigation and adjudication of criminal cases. Topics include laws of arrest, search and seizure, interrogations, criminal court function and post-trial remedies. (Degree Credit) (CSU) (C-ID: AJ 122)

**AJ 222 F Rules of Evidence****3 Units**

54 hours lecture per term. This course covers the basic rules of evidence admissibility in criminal proceedings. This course explains legal principles regarding how criminal courts determine reliable, relevant and probative evidence. Discussion points include the origin, development, philosophy and constitutional basis of evidence, as well as the considerations affecting arrest, search and seizure. Emphasis is placed on developing the skills of law enforcement officer to effectively present courtroom evidence. (Degree Credit) (CSU) (C-ID: AJ 124)

**AJ 223 F Criminal Investigation****3 Units**

54 hours lecture per term. This course examines the fundamentals of the criminal investigation process. This course is designed to acquaint the student with investigative theory, organization, and process necessary to aid in a successful criminal case clearance. Students explore basic responsibilities and techniques used to manage crime scenes, preserve evidence, interview witnesses, interrogate suspects, and accurately document case findings for trial preparation. Emphasis is placed on the investigation of specific crimes employing the case study method. (Degree Credit) (CSU) (C-ID: AJ 140)

**AJ 226 F Narcotics and Vice Control****3 Units**

54 hours lecture per term. This course will cover the various types of narcotics and their uses, with resultant law enforcement problems. This course will provide instruction regarding narcotics and vice enforcement, cures, and rehabilitation programs. (Degree Credit) (CSU)

**AJ 230 F Crime Scene Techniques****3 Units**

54 hours lecture per term. This course will introduce the student to field techniques for the collection and preservation of physical evidence at the scene of the crime. The course will cover physical and testimonial evidence, scene responsibilities, processing the scene, fingerprint evidence, trace evidence, blood and bodily fluids, impression evidence, firearms evidence, dangerous drugs and clandestine laboratories, sexual assaults, domestic abuse, elder abuse, burglaries and homicide crime scenes. (Degree Credit) (CSU) (C-ID: AJ 150)

**AJ 252 F Police Patrol****3 Units**

54 hours lecture per term. This course covers the fundamentals of proper patrol procedures and techniques, with particular emphasis on officer safety, public relations, and crime prevention. This course is designed to develop competency in handling frequently encountered police problems through the analysis of actual situations. This course will focus on developing officer survival skills through threat-based decision making. (Degree Credit) (CSU)

**AJ 276 F Investigation of Homicidal Behavior****3 Units**

54 hours lecture per term. This course is a historical perspective of homicide in America today. Topics include motives for murder, psychology of murder, criminal investigation into homicide, victims of murder, those who murder and various methods of murder. The course will also examine the phenomena of serial and mass murderers. (Degree Credit) (CSU)

**AJ 278 F Multicultural Issues within Administration of Justice****3 Units**

54 hours lecture per term. This course is a theoretical and conceptual overview of multicultural concepts and issues; an application of those concepts and issues to Administration of Justice; identification of problems related to our increasingly diverse population; examination of strategies to overcome those problems, particularly in relation to the maintenance of social order. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC)

**AJ 279 F Contemporary Issues in Law Enforcement****3 Units**

54 hours lecture per term. This course explores major legal, societal and organizational issues affecting the law enforcement profession. Topics include ethics, police use of force, high-speed vehicle pursuits, cultural awareness, workplace diversity, and community-oriented policing and problem solving. The course emphasizes the development of problem solving strategies as a way to effectively deal with the challenges that police face. (Degree Credit) (CSU)

## Anatomy and Physiology (ANAT)

**ANAT 231 F General Human Anatomy****4 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance

54 hours lecture and 54 hours lab per term. This course includes a logical analysis of body tissues, organs and systems. It stresses the microscopic, developmental and gross anatomy of mammals, with special emphasis on human anatomy. Special attention is given to pathological as well as normal conditions. The laboratory work includes study of the developmental, microscopic and gross anatomy of preserved specimens and models. This course is designed primarily for students interested in careers in various allied health fields. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: BIOL 110B)

**ANAT 240 F Human Physiology****5 Units****Prerequisite(s):** CHEM 101 F and ANAT 231 F, both with a grade of C or better

54 hours lecture and 108 hours lab per term. This course provides an in-depth study of human function. The focus of the course is maintenance of homeostasis. Organ systems are studied with respect to their interactions under normal and abnormal conditions. Laboratory experiences reinforce concepts studied in lecture and introduce students to clinical techniques. The course is designed for pre-health profession majors and other students that require a one semester course in physiology. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: BIOL 120B)

## Anthropology (ANTH)

**ANTH 101 F Physical Anthropology****3 Units**

54 hours lecture per term. This course is a study of the theories of human origin and evolutionary development using genetic, fossil evidence, plus a comparison of humankind anatomically and behaviorally with the higher primates. This field includes current research on the intellectual and cultural equality of the human races. At a number of California State universities and other four-year institutions, this course may be used for social sciences or biological science credit. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 110)

**ANTH 101HF Honors Physical Anthropology****3 Units**

54 hours lecture per term. This Honors-enhanced course is a study of the theories of human origin and evolutionary development using genetic, fossil evidence, plus a comparison of humankind anatomically and behaviorally with the higher primates. This field includes current research on the intellectual and cultural equality of the human races. At a number of California State colleges and other four-year institutions, this course may be used for social sciences or biological science credit. This course will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments and a higher level of critical thinking. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 110)

**ANTH 101LF Physical Anthropology Lab****1 Unit****Corequisite(s):** ANTH 101 F with a grade of C or better.

54 hours lab per term. This course provides an introduction to lab methods used in research in physical (biological) anthropology. Topics include the classification, biology, and behavior of living primates, human skeletal and physiological anatomy, human genetics, methods of phylogenetic reconstruction, and evidence for the evolutionary history of humans and other primates. Emphasis is on practical experience. Students will examine skeletal materials from living and extinct primates, participate in experiments to illustrate analytical techniques used in modern physical anthropology, and observe the behavior of living primates through field trip and/or audio visual resources. In addition to lab exercises, one short research paper will be required. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: ANTH 115L)

**ANTH 102 F Cultural Anthropology****3 Units**

54 hours lecture per term. This course is an introduction to the cultural aspects of human behavior and the nature of culture. It includes the uniformities and variabilities of culture, social organization, family structure, economics, politics, religion, language, and other basic topics. This course fulfills the Multicultural Education Requirement for graduation. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 120)

**ANTH 102HF Honors Cultural Anthropology****3 Units**

54 hours lecture per term. This Honors-enhanced course is an introduction to the cultural aspects of human behavior and the nature of culture. It includes the uniformities and variabilities of culture, social organization, family structure, religion, language, and other basic topics. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 120)

**ANTH 103 F Introduction to Archaeology****3 Units**

54 hours lecture per term. This course covers a specialized branch of anthropology that studies cultural and physical anthropological evolutionary development; archaeology uses scientific methods and theories to trace human ecology from the past to the present. Archaeologists deal with remains of past societies such as tools, shelter, remains of animals eaten for food, and other objects that have survived. These remains, termed artifacts, are used to reconstruct past behavior. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 150)

**ANTH 103HF Honors Introduction to Archaeology****3 Units**

54 hours lecture per term. This Honors-enhanced course focuses on anthropological archaeology, a specialized branch of anthropology that studies cultural and physical anthropological evolutionary development. Archaeology uses scientific methods and theories to trace human ecology from the past to the present. Archaeologists deal with remains of past societies such as tools, shelter, remains of animals eaten for food, and other objects that have survived. These remains, termed artifacts, are used to reconstruct past behavior. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 150)

**ANTH 105 F Language and Culture****3 Units**

54 hours lecture per term. This course covers the nature of language in relation to culture and how language processes develop and change. Students will examine how cultural knowledge is linguistically organized and how language shapes our perception of the world, and how it acts as a guide, both symbolic and practical, to understanding human actions. A basic introduction into the primary concepts of the discipline help students to understand what language reveals about human beings as bearers of culture. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 130)

**ANTH 107 F Anthropology of Magic, Witchcraft and Religion****3 Units**

54 hours lecture per term. This course is an anthropological survey of systems of magic, witchcraft, and religion from the past and the present, from societies around the world. It examines beliefs and practices in cultural settings with respect to the role of the supernatural. Special topics include myth, religious healing, witchcraft and sorcery, ritual and millenarian movements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 107HF Honors Anthropology of Magic, Witchcraft and Religion****3 Units**

54 hours lecture per term. This course is an anthropological survey of systems of magic, witchcraft, and religion from the past and the present, from societies around the world. It examines beliefs and practices in cultural settings with respect to the role of the supernatural. Special topics include myth, religious healing, witchcraft and sorcery, ritual and millenarian movements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 109 F Primate Behavior****3 Units**

54 hours lecture per term. This course covers a survey of primates from around the world, with in-depth examinations of their behavior, ecology, taxonomy and anatomy. Students will gain experience in the collection and analyzing of behavioral data. Current issues in primate conservation will also be explored. Specific primate species will be used as case studies to further enhance students' knowledge of prosimians, monkeys, and apes. (Degree Credit) (CSU) (UC)

**ANTH 199 F Anthropology Independent Study****1 Unit**

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of the Social Sciences through individual study and small group conferences. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC credit limitation depending upon course content; UC review required.)

**ANTH 209 F Cultures of Latin America****3 Units**

54 hours lecture per term. The scope of this course focuses on the exploration of the diverse cultures of ancient Latin America or Mesoamerica from the origins of civilization to the period of the Spanish conquest and some of the current issues indigenous people face in Latin America. The study of ancient Latin American cultures will be based on the four fields of anthropology. The study will be based on archaeological investigations, ethnographical research and various theoretical frameworks to enhance the understanding of the human experience in Latin America. The course will attempt to recreate the lifestyle, social structures, agricultural methods, religious practices and other various culture aspects of Meso-American civilizations in order to have a better understanding of the current conditions and aspects of the various diverse cultural groups from Latin America. The focus of this course will be on Mesoamerican civilizations as well as the Inca and other indigenous groups from South America. This course fulfills the Multicultural Education Requirement for graduation. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 211 F Celtic Cultures****3 Units**

54 hours lecture per term. This course will utilize data from archaeology, genetics, historical linguistics, Celtic myth, cultural anthropology, classic Greek and Roman texts to explore Celts of the past and present. The complex whole that encompasses Celtic society and culture over time and space will be studied including Celtic religion, myth and ritual, roles of females and males, art, warfare, ways of life, as well as current struggles for social, linguistic and political rights. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 215 F Global Issues in Anthropological Perspective****3 Units**

54 hours lecture per term. This course explores anthropological perspectives on issues of importance in an increasingly global society. Topics include culture contact, immigration, ethnic conflict, religion, global poverty, inequalities, trans-nationalism, neoliberalism, development and globalization. This course fulfills the Multicultural Education Requirement for graduation. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) CSU GE, IGETC

## Architecture (ARCH)

**ARCH 111 F Introduction to Architecture****3 Units**

54 hours lecture per term. This course is designed for architecture majors as well as people interested in learning more about the architectural profession. The focus is split into two areas of emphasis. Architectural theory and history are explored from ancient civilizations to the present trends in design. The practical/business side of architecture is discussed; the topics include education requirements and job opportunities as well as the architect's perceived role in our society. (Degree Credit) (CSU) (UC)

**ARCH 113 F Architectural Drawing I****3 Units**

36 hours lecture and 72 hours lab per term. This course is designed to develop graphic and visualization skills, and its link as a means of externalizing, evaluating and communicating ideas. It will include both freehand and mechanically constructed type of orthographic, axonometric, oblique and lineal perspective drawings on two-dimensional surfaces. It is intended to develop the use of instruments, lettering, line weights, graphics and presentation layout. The media to be used will include pencil, ink, colored pencil and markers. (Degree Credit) (CSU) (UC)

**ARCH 114 F Architectural Materials and Methods****3 Units**

54 hours lecture per term. This course covers the various types of building materials used in construction and their applications in the formulation of specifications for building design. (Degree Credit) (CSU)

**ARCH 124 F Architectural CAD I****3 Units**

36 hours lecture and 54 hours lab per term. This is a beginning course in using the CAD system for architectural applications. The course covers elementary principles associated with the various menu and command structures in computer-assisted drafting. Topics included are file management, layering, symbol libraries, orthographic projection, dimensioning, line types and the generation of text. (Degree Credit) (CSU)

**ARCH 125 F Design Studio I****4 Units**

**Prerequisite(s):** ARCH 113 F with a grade of C or better.

54 hours lecture and 54 hours lab per term. This course introduces the student to the formal and spatial language of architecture. Assignments will be explored in the form of lab projects. Such projects will be the analysis of case studies, and their integration in the design process. (Degree Credit) (CSU)

**ARCH 215 F Design Studio II****4 Units**

**Prerequisite(s):** ARCH 125 F with a grade of C or better.

54 hours lecture and 54 hours lab per term. This course is a continuation of Design Studio I to further enhance skills in the development of a personal theory of design. Students will extend their understanding in such areas as visualization, decision making, and evaluation. (Degree Credit) (CSU)

**ARCH 225 F Design Studio III****4 Units**

**Prerequisite(s):** ARCH 215 F with a grade of C or better.

54 hours lecture and 54 hours lab per term. This course is a continuation of Design Studio II to further enhance skills in understanding the organization of design and emphasis on the means of architecture. Site analysis and building orientation will be explored. Two- and three-dimensional drawings and model building will be produced. (Degree Credit) (CSU)

**ARCH 227 F Internship in Architecture****2-4 Units**

18 hours lecture and 75-225 hours of supervised employment per term. This course is designed to provide learning opportunities through employment in an architectural firm or related type of business. No more than three units may be applied toward the degree or certificate. (Degree Credit) (CSU)

**ARCH 924 F Architectural CAD II** **3 Units**  
**Advisory:** ARCH 124 F or industry work in related areas  
 36 hours lecture and 54 hours lab per term. This is an intermediate course that utilizes the CAD system for architectural applications. The course incorporates principles associated with the various menu and command structures in computer-assisted drafting to develop solutions to 2D and 3D design problems. (CSU) (Degree Credit)

**ARCH 934 F Architectural CAD III** **3 Units**  
**Advisory:** ARCH 924 F or industry work in related areas  
 36 hours lecture and 54 hours lab per term. This is an advanced course utilizing the CAD system to produce a set of construction documents. This course deals with two-story residential construction as applicable to the present professional standards in terms of technical drafting and 2-D and 3-D computer drafting. (Degree Credit) (CSU)

## Art (ART)

**ART 090 F Advanced Topics in Art** **3 Units**  
**Advisory:** 3-6 units of commercially related art or computer graphics courses, or professional equivalent  
 18-54 hours lecture and 18-162 hours lab per term. This course is designed to address new and emerging topics and trends and technology in Commercial Art and Design, as well as to provide personal growth to students in a variety of Art and computer graphics lab courses. This course will be offered in modules of advanced topics. Unit credit may range from 1 to 3 units per module. Consult the class schedule to verify topic areas and credit offered for each topic.

**ART 100 F Fundamentals of Art** **3 Units**  
 54 hours lecture per term. This introductory course investigates the visual elements and principles of art through lectures, reading, films and hands-on experience. It also examines, in the same manner, historical styles and themes in art as well as materials and techniques. Pass/No Pass/Letter Grade option. (Degree Credit) (CSU) AA GE, IGETC

**ART 110 F Introduction to Art** **3 Units**  
 54 hours lecture per term. This course provides an introduction to art from prehistoric times to the present. Classroom presentations are supplemented by gallery and museum visits. While examining the role that the visual arts have played in the development of the cultures of the world, the student is exposed to a wide variety of artistic media. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ARTH 100)

**ART 112 F Art History - Ancient to Medieval** **3 Units**  
 Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course is a study of Western art, including architecture, sculpture and painting from Prehistory through the Middle Ages. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ART 110)

**ART 113 F Art History - Renaissance to Modern** **3 Units**  
 Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course is a survey of architecture, sculpture and painting from the Renaissance through the century. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ARTH 120)

**ART 113HF Honors Art History - Renaissance to Modern** **3 Units**  
 54 hours lecture per term. This Honors-enhanced course is a survey of architecture, sculpture and painting from the Renaissance through the 20th century. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ART 114 F Art History - Impressionism to Present** **3 Units**  
 54 hours lecture per term. This course is a survey of the development of modern architecture, sculpture and painting from their origins in the 19th century to the present. Art History courses are open to all students and course may be taken in any sequence; at least two semesters are required for art history majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ART 115 F The Museum Experience (formerly Museum Survey)** **3 Units**  
**Advisory:** ART 110 F or completion of any art history course.  
 54 hours lecture per term. This is a basic course in the study of museums and their collections. The course includes on-site lectures pertaining to the function of museums, the history of the art collections, the analysis and interpretation of the art in each collection and exhibition design. (Degree Credit) (CSU) AA GE

**ART 116 F Art History - The Art of Mexico** **3 Units**  
 Pass/No Pass/Letter Grade Option. 54 hours lecture per term. This course is a survey of the visual arts of Mexico from the earliest civilizations to contemporary Mexican and Chicano art. Both traditional and popular art forms are studied in the context of the cultures that produced them. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ART 117 F Art History - American Art** **3 Units**  
 54 hours lecture per term. This course is a survey of American art and architecture from the 17th century to the present. Lectures will present an overview of painting, sculpture, photography, and architecture from Colonial beginnings through recent Post-Modern developments. Emphasis will be placed on discovering what is American in American art. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ART 118 F Color Theory** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to fundamentals of color theory through lecture and applied exercises in paint and collage. Includes discussion of cultural differences in color symbolism and the historical development of conceptual models of color usage in both science and art. Theoretical focus will be on the 12 color system of color organization with emphasis on the color theories of Itten and Albers. The lab exercises focus on practical applications of color theory in the visual arts professions. The course concludes with an introduction to digital color as used in computer graphics. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 270)

**ART 120 F Basic Design** **3 Units**  
 36 hours lecture and 72 hours lab per term. This is an introduction to strategies and techniques for the crafting, selecting and arranging visual elements in order to create artwork that engages the viewer. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 100)

**ART 121 F Three-Dimensional Design** **3 Units**  
**Advisory:** ART 120 F  
 36 hours lecture and 72 hours lab per term. This course is an introduction to three-dimensional design. This course defines the contrast of three-dimensional form to the two-dimensional format. The focus is on composition of a 360 degree form, in materials selected to best depict this contrast. This course involves the use of hand tools and some power equipment. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 101)

**ART 122 F Museum Studies - Introduction to Gallery Practices** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course provides an introduction to gallery practices through hands-on practice in installing art exhibitions in the Fullerton College Art Gallery. This course includes an introduction to the basic skills of installing art exhibitions and includes field trips to museums and galleries. Recommended for Art majors. (Degree Credit) (CSU)



- ART 123 F Business Practices in Art** **3 Units**  
54 hours lecture per term. This course examines the basic business and professional practices needed to begin or continue a career in the visual arts. The class will require portfolio presentation, creation of resume and self-promotional pieces in addition to an understanding of proposals, contracts, and personal business practices. Also, a personal business notebook is to be kept by the students for future use. (Degree Credit) (CSU)
- ART 124 F Museum Studies - Exhibition Production** **3 Units**  
*Prerequisite(s)*: ART 122 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course provides increasing responsibility in exhibition planning, research, operation and management. This course introduces the creation of educational materials for the gallery visitor and the organizational structure of museums and includes field trips to museums and galleries. This course is recommended for Art majors. (CSU)
- ART 125 F Museum Studies - Exhibition Design and Careers** **3 Units**  
*Prerequisite(s)*: ART 124 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course provides an introduction to exhibition design and museum careers. This course provides an opportunity to build gallery practice skills, and develop a deeper understanding of exhibition planning, research, operation and management of the Fullerton College Art Gallery. Museum careers will also be explored. This course is recommended for Art majors. (Degree Credit) (CSU)
- ART 127 F Beginning Floral Painting (formerly Applied Painting - Floral)** **2 Units**  
*Prerequisite(s)*: ART 188 F or ART 189 F, with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course emphasizes realism as it applies to form, value and color. Students will learn the fundamentals of color harmony and structure; work is from nature, still life and photography in various painting media. (Degree Credit) (CSU) (UC)
- ART 128 F Portrait Painting** **2 Units**  
*Advisory*: ART 129 F or ART 186 F and ART 189 F.  
18 hours lecture and 54 hours lab per term. This course will offer the student the opportunity to develop portraiture through schematic studies and observational methods using models and plaster busts. Representational observation of facial features and varied facial types and expressions will be developed into portrait painting. Costume, setting, color harmony and historical and contemporary portraiture concepts to be studied. (Degree Credit) (CSU) (UC)
- ART 129 F Portrait Drawing** **2 Units**  
*Advisory*: ART 182 F and ART 186 F  
18 hours lecture and 54 hours lab per term. This is a basic course in portrait drawing based upon the study of the human head. Facial structure and the representation of many types of people in various art media are explored. (Degree Credit) (CSU) (UC)
- ART 130 F Intermediate Portrait Drawing** **2 Units**  
*Prerequisite(s)*: ART 129 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course covers the advanced study of portrait drawing through schematic studies and observational methods using models and plaster busts. Costume, setting, historical and contemporary portraiture concepts will be studied. Observation of facial features and varied facial types and expressions will be developed. (CSU) (UC)
- ART 131 F Introduction to Printmaking** **3 Units**  
*Advisory*: ART 120 F or ART 182 F  
36 hours lecture and 72 hours lab per term. This course provides experience with materials and processes involved in non-toxic approaches to relief, intaglio, screen-print and lithography, including the exploration of digital print processes. Designed to encourage graphic creativity and professional skill in the development of plates and their printing augmented by an awareness of traditional and contemporary methods and styles. (Degree Credit) (CSU) (UC) (C-ID: ARTS 220)
- ART 132 F Intermediate Printmaking** **3 Units**  
*Prerequisite(s)*: ART 131 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course provides students with an opportunity to build skills and expand the knowledge and experience with materials and processes of a variety of printmaking procedures that was initiated in the first semester of Printmaking. Emphasis and concentration is on creating an edition of prints. (Degree Credit) (CSU)
- ART 137 F Basic Drawing for Entertainment Arts** **3 Units**  
36 hours lecture and 72 hours lab per term. This course is an introduction to the fundamentals of representational drawing focusing on entertainment art preparation. Media used may include pencil, colored pencil, markers, watercolor, and mixed media. This course has class field trips dedicated for out-of-class sketchbook requirements emphasizing drawing from life by observing people, plants and architecture. This course is designed for art majors who have an interest in pursuing illustration and entertainment art courses. (Degree Credit) (CSU)
- ART 138 F History of Graphic Design** **3 Units**  
*Advisory*: ART 140 F or DART 100 F.  
36 hours lecture and 54 hours lab per term. This course explores the history of graphic design from the 19th century to present day. In addition to studying historical design trends, students will also produce design projects based on specific vintage styles. This course is taught in the computer lab and utilizes the Adobe Creative Suite of software. \$15 materials fee payable at registration. (Degree Credit) (CSU)
- ART 139 F Fashion Sketching** **2 Units**  
18 hours lecture and 54 hours lab per term. This course is designed for the student interested in a fashion career or the graphic design or illustration major wanting to develop fashion sketching skills. The course will include refinement of basic skills in drawing of the clothed figure as well as rendering of fabrics and patterns. Media used includes graphite, ink, marking pens, charcoal, colored pencils, photocopy, and mixed media. Development of a personal sketching style will be encouraged. (Degree Credit) (CSU)
- ART 140 F Graphic Design I (formerly Introduction to Advertising and Graphic Design)** **3 Units**  
36 hours lecture and 54 hours lab per term. This course emphasizes communication through use of concepts, type and images. Topics include development of layout and computer skills, style and an introduction to logotype design. \$15 materials fee payable at registration. (Degree Credit) (CSU)
- ART 141 F Typography** **3 Units**  
*Advisory*: ART 140 F  
36 hours lecture and 54 hours lab per term. This course focuses on the use of type and typography in print and digital graphic design and prepares students to meet industry standards in the design and advertising industries. (Degree Credit) (CSU)

- ART 142 F User Experience - UX Design** **3 Units**  
*Advisory:* ART 140 F or DART 100 F or DART 102 F.  
 36 hours lecture and 54 hours lab per term. This course develop skills in user experience and interface design process including selecting interfaces that are meaningful to users and relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. \$15 materials fee required at time of registration. (Degree Credit) (CSU)
- ART 143 F Basic Drawing for Entertainment Arts - Drawing from the Imagination** **3 Units**  
*Prerequisite(s):* ART 137 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course applies the fundamentals of representational drawing and form, focusing on drawing and designing from the imagination, to complete industry level assignments. This course is designed for art majors who have an interest in pursuing careers in animation and entertainment art design. (Degree Credit) (CSU)
- ART 144 F Fundamentals of Cartooning** **2 Units**  
*Advisory:* ART 182 F or ART 179 F  
 This course is an introduction to basic cartooning techniques and includes sketching, inking, and the development of characters. Projects include gag line cartooning, political cartooning, and the development of a weekly cartoon strip. In addition, there will be an analysis of the elements of both the humorous and the dramatic in cartoon art. This analysis will include a review of historically significant Sunday funnies and comic book characters, as well as an examination of major trends in comic art from 1895 to the present. (Degree Credit) (CSU)
- ART 145 F Publication Design** **3 Units**  
*Advisory:* ART 140 F and DART 100 F  
 36 hours lecture and 54 hours lab per term. This is an advanced course with emphasis on the design of publications such as brochures and magazine layouts to simulate real world assignments. Finished comprehensive projects will be created on the computer to a professional quality suitable for inclusion in a student's portfolio. \$15 materials fee due at registration. (Degree Credit) (CSU)
- ART 146 F Advertising Design** **3 Units**  
*Advisory:* ART 140 F and DART 100 F  
 This is an advanced level course with emphasis on design for advertising. The assignments are intended to simulate real world experience and may include advertising campaigns, posters, and billboards. Finished comprehensive projects will be created on the computer to a professional quality suitable for inclusion in a student's portfolio. \$15 materials fee is required at time of registration. (Degree Credit) (CSU)
- ART 147 F Graphic Design II (formerly Production Techniques for Graphic Designers)** **3 Units**  
*Advisory:* ART 140 F or DART 100 F.  
 36 hours lecture and 54 hours lab per term. This is an advanced course in the study of methods and techniques used in producing advertising and design projects. Areas emphasized are electronic pre-press, typography and commercial printing methods. This course is oriented specifically to the needs of graphic design students. \$15 materials fee payable at registration. (CSU) (Degree Credit)
- ART 148 F Packaging Design** **3 Units**  
*Advisory:* ART 140 F  
 36 hours lecture and 54 hours lab per term. This is an advanced level course with emphasis on design for packaging. The assignments are intended to simulate real world experience and will include designing for a range of 3D surfaces. Finished comprehensive projects will be created on the computer to a professional quality. Students will be introduced to basic digital photography concepts for recording their work and creating images suitable for portfolio inclusion. \$15 materials fee is required at registration. (Degree Credit) (CSU)
- ART 152 F Ceramics Lab** **1 Unit**  
*Corequisite(s):* ART 153 F with a grade of C or better.  
 54 hours lab per term. This course provides students with an opportunity to work in the ceramics lab doing studio ceramics' activities including handbuilding techniques, slab, coil, pinch construction, glaze preparation and application, throwing on the potter's wheel, sculptural and combined building techniques and other studio activities. Open Entry/Open Exit. Pass/No Pass only. (Degree Credit) (CSU) (UC)
- ART 153 F Ceramics - Beginning Handbuilding (formerly ART 150AF)** **3 Units**  
 36 hours lecture and 72 hours lab per term. This is a survey course dealing with three-dimensional design in clay as an entry into appreciation of the creative process and its physical execution using ceramic hand building techniques. Emphasis is placed on imagining, designing, creating, and evaluating vessel and sculptural form, using the coil, slab and pinch processes, and on textural and sculptural embellishment of surface. In addition, review of historical and traditional models, glazes, and firing are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 154 F Ceramics - Beginning Throwing** **3 Units**  
*Prerequisite(s):* ART 153 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is primarily about developing skill and technique in the use of the potter's wheel to create and finish controlled standard hollow forms. The class also includes an introduction to design, decoration, and glazing of wheel-thrown utilitarian forms, and basic technology of clay, glazes and firing. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 155 F Intermediate Ceramics** **3 Units**  
*Prerequisite(s):* ART 153 F or ART 154 F, with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course will offer the student more in-depth knowledge and refined skills in the study of hand building and/or wheel throwing techniques, design of forms, and surface decoration. Kiln operation is also emphasized. Development of further skills, knowledge, and conceptual ability is accomplished through individually determined projects. (Degree Credit) (CSU)
- ART 156 F Animal Drawing** **3 Units**  
*Advisory:* ART 182 F  
 54 hours lecture per term. This course covers the principles and practices of classical animal drawing skills, including comparative anatomy, form construction, gesture and motion. (Degree Credit) (CSU)
- ART 157 F Sketching for Animators and Illustrators** **3 Units**  
*Prerequisite(s):* ART 182 F with a grade of C or better  
*Advisory:* ART 186AF  
 36 hours lecture and 72 hours lab per term. This course is designed to enable the art student who wishes to develop drawing skills in the commercial fields of animation and/or illustration through focused study on quick sketch visualization, expressive anatomy, freehand perspective, character and storyboard development. (Degree Credit) (CSU)

- ART 160 F Fundamentals of Sculpture** 3 Units  
36 hours lecture and 72 hours lab per term. This course is an examination of sculpture as a vehicle for social, political and cultural expression. Students are introduced to sculpture including basic concepts, materials, techniques, and terminology. This course focuses on modeling, casting, mold-making, and basic fabrication. This course is appropriate for the beginning student and those with limited sculpture experience. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 161 F Advanced Sculpture** 3 Units  
*Advisory:* ART 160 F.  
36 hours lecture and analysis and 72 hours lab per term. This course is an introduction to the support processes of sculpture, to expand the development of techniques, materials and processes. Class requirements are arranged by contract to allow a wide diversity of projects. Emphasis is on development of individual style and the ability to plan and direct a semester of sculpture. (Degree Credit) (CSU) (UC)
- ART 162 F Sculpture Cast Metal - Beginning** 3 Units  
36 hours lecture and 72 hours lab per term. This course is an introduction to the lost wax bronze casting process. This course includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. In consecutive semesters, the complexity of the projects require alternative skills, techniques, and materials. (Degree Credit) (CSU)
- ART 163 F Sculpture Open Studio** 1 Unit  
*Corequisite(s):* Completion of, or concurrent enrollment in any of these 3-Dimensional courses: ART 121 F or ART 160 F or ART 161 F or ART 162 F or ART 164 F or ART 173 F or ART 174 F or ART 175 F or ART 176 F or ART 185 F or ART 262 F or ART 273 F or ART 274 F or ART 275 F or ART 276 F or ART 278 F or ART 285 F with a grade of C or better.  
54 hours lab per term. This course gives access to the sculpture facility and equipment to work on new or ongoing projects. Activities include independently furthering technical development, exploring diverse sculptural media, and developing personal subject matter. (Degree Credit) (CSU)
- ART 164 F Sculpture: Metal Fabrication** 3 Units  
36 hours lecture and 72 hours lab per term. This course is an introduction to the support processes of sculpture and is designed to expand student development of sculptured techniques, materials and processes. This course will focus on basic techniques and processes used for fabricating metal sculpture. An historical examination of sculpture as a vehicle for social, political and cultural expression. This course is not a substitute for any welding course. (Degree Credit) (CSU)
- ART 166 F Contemporary Art Studio** 3 Units  
*Advisory:* Any art studio course or art history course with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is an introduction to the practices of contemporary art, including approaches to painting, sculpture, installation art, performance art, video, sound, and digital technologies. Students use traditional and digital processes to create works of art. This course is designed for Art majors. (Degree Credit) (CSU) (UC)
- ART 170 F Sketching for Animators and Illustrators- Visual Development (formerly ART 157 F)** 3 Units  
*Prerequisite(s):* ART 157 F and ART 182 F with a grade of C or better.  
*Advisory:* ART 243 F and DART 135 F  
36 hours lecture and 72 hours lab per term. This course is designed to introduce the student to the visual development workflow of production for animated feature films. Visual development artists are responsible for establishing the look and feel of a movie before it begins production. Visual development combines the highest level of design encompassing environments, characters, props and staging. (Degree Credit) (CSU)
- ART 173 F Jewelry Casting** 3 Units  
36 hours lecture and 72 hours lab per term. This course is an introduction to basic concepts and techniques in designing and casting jewelry including reproduction techniques and wax models. The focus of this course is on originality in fine art jewelry design, relating to contemporary and historical design. (Degree Credit) (CSU) (C-ID: ARTS 281)
- ART 174 F Beginning Jewelry Fabrication** 3 Units  
36 hours lecture and 72 hours lab per term. This course is an introduction to the concepts and techniques in the design and construction of jewelry and small metal objects. Fabrication techniques will require the cutting, forming, and soldering techniques of sheet metal. The focus of this course is on original design of fine art jewelry in precious metals. (Degree Credit) (CSU) AA GE, CSU GE
- ART 175 F Intermediate Jewelry Fabrication** 3 Units  
*Prerequisite(s):* ART 174 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This class builds on skills and information gained in ART 174 F with refined concepts and techniques in the design and construction of jewelry and metal objects using cutting, forming and soldering. The focus of this course is on original design for fine art jewelry. (Degree Credit) (CSU)
- ART 176 F Stained Glass** 3 Units  
36 hours lecture and 72 hours lab per term. This course is an introduction to the stained glass process, including the basics of designing and constructing both two and three-dimensional stained glass projects using the "Tiffany Foil" technique and other cold glass processes such as mosaic and lamp building. Project emphasis will be in the design and fabrication of residential and commercial pieces. Other topics include overlay, sandblasting, fusing, and three dimensional and large scale projects. Production hours outside of class time are required. (Degree Credit) (CSU)
- ART 179 F Drawing for Non-Art Majors** 2 Units  
18 hours lecture and 54 hours lab per term. This is a beginning course in traditional and contemporary drawing techniques and terminology with an emphasis on representational drawing accomplished with a variety of media, including, but not limited to, graphite, charcoal, conte, ink, oil and/or chalk pastel, and colored pencil. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 180 F Rendering** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better.  
36 hours lecture and 72 hours lab per term. The main objective of this class is creating the illusion of three dimensions on a two-dimensional drawing surface. The lectures cover the basics of the visual perception of space, and the artistic techniques based on it. Rendering topics include explanations of the surface qualities of various materials, and the accurate depiction of the materials' interaction with light. Basics of perspective drawing will also be covered in this course. This course also meets student needs in advertising, illustration, and industrial design. (Degree Credit) (CSU)

- ART 181 F Drawing from the Masters** **3 Units**  
**Advisory:** ART 182 F and ART 186 F.  
 54 hours lecture per term. This course covers working methods and media of master draftsmen from previous centuries. There is an emphasis on analyzing and copying master drawings in a variety of media. Further emphasis is placed on the traditional approach to drawing as practiced by masters such as Durer, Michelangelo, da Vinci, Raphael, Rubens and others. Field trips may be required outside of regularly scheduled class times. (Degree Credit) (CSU) (UC)
- ART 182 F Basic Drawing** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to the fundamentals of representational drawing. Media used may include pencil, ink, charcoal, conte, pastels, watercolor, and mixed media. This course is designed for art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 110)
- ART 183 F Representational Drawing** **3 Units**  
**Advisory:** ART 127 F or ART 182 F.  
 36 hours lecture and 72 hours lab per term. This course is a study in contemporary and traditional realism in the area of drawing. Media may include pencil, ink, charcoal, conte, pastel, watercolor, and/or mixed media. This course is recommended for Art majors. (Degree Credit) (CSU) (UC)
- ART 184 F Expressive Drawing** **3 Units**  
**Prerequisite(s):** ART 182 F with a grade of C or better.  
**Advisory:** ART 186 F  
 36 hours lecture and 72 hours lab per term. This course surveys a variety of drawing styles introduced by artists whose mark making itself communicates emotion, whether or not recognizable objects are depicted. Starting with Van Gogh and continuing through German Expressionism and Abstract Expressionism, the course leads toward the development of a personal, contemporary drawing style. Media covered include ink, pastel, watercolor, collage and mixed media. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 185 F Life Sculpture** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to figurative sculpture with emphasis on accurate anatomical training in sculpture. This course is designed to develop an understanding of the human form, this course focuses on structure, gesture and detail. The skeleton, plaster casts, and the life model are used in this process. (Degree Credit) (CSU) (UC) AA GE
- ART 186 F Beginning Life Drawing** **3 Units**  
**Advisory:** ART 137 F or ART 182 F.  
 36 hours lecture and 72 hours lab per term. This course is an introductory course in drawing from the human figure. Course emphasis is on the development of a basic understanding of structure, anatomy and movement. The focus of this course is on accurate anatomical study, through continued use of the skeleton and life models. Required for all art majors. (Degree Credit) (CSU) (UC) AA GE (C-ID: ARTS 200)
- ART 187 F Watercolor for Non-Art Majors** **2 Units**  
 18 hours lecture and 54 hours lab per term. This is an introductory course in watercolor painting with emphasis on a wide variety of traditional and contemporary techniques and skills. Creative self-expression is encouraged using the themes of still life, landscape and figurative. Media includes both transparent and opaque watercolor and related materials. Letter Grade or Pass/No Pass option.(Degree Credit) (CSU) (UC) AA GE
- ART 188 F Beginning Watercolor Painting** **3 Units**  
**Advisory:** ART 182 F  
 36 hours lecture and 72 hours lab per term. This course will provide an understanding of the structure, techniques, and vocabulary of transparent watercolor painting as well as encourage the student to develop conceptual, perceptual, and technical knowledge of all the design elements. A variety of traditional and contemporary methods are presented through demonstration, lecture, videotapes, individual instruction, critiques and class discussions. (Degree Credit) (CSU) (UC) AA GE
- ART 189 F Beginning Painting** **3 Units**  
**Advisory:** ART 118 F and ART 182 F.  
 36 hours lecture and 72 hours lab per term. This course is an introduction to materials and techniques of painting. The focus is on using observational skills to render basic objects using value, textures and principals of design. Students are developing elementary skills of painting as a means of self-expression. This course is required for art majors. (Degree Credit) (CSU) (UC) AA GE (C-ID: ART 210)
- ART 190 F Beginning Landscape Painting (formerly titled Applied Landscape)** **2 Units**  
**Prerequisite(s):** ART 188 F or ART 189 F, with a grade of C or better.  
 18 hours lecture and 54 hours lab per term. This course is designed to provide students with the latest ideas in the study of landscape painting. Students will learn to paint landscapes, using oil or watercolor. Students will investigate landscape painting, both classic and contemporary approaches, using a variety of painting techniques. (Degree Credit) (CSU)
- ART 194 F Studio Painting Lab** **2 Units**  
**Prerequisite(s):** ART 189 F with a grade of C or better.  
 18 hours lecture and 54 hours lab per term. This course provides the opportunity for the painting student to work on new or ongoing projects. Painting activities include improving skill level, furthering technical development, exploring diverse media, developing personal subject matter and style. Open Entry/Open Exit. (Degree Credit) (CSU)
- ART 195 F Anatomical Drawing** **3 Units**  
**Advisory:** ART 137 F or ART 182 F.  
 54 hours lecture per term. The course explains and demonstrates how a specific area of the human body is constructed, how it moves and how it looks in different positions. The emphasis is on breaking the figure down into manageable components and learning to draw their three-dimensionality. There is an added emphasis on copying and analyzing a variety of anatomical studies to compile a notebook representing all of the components of the figure. This class serves the needs of the student in drawing, painting and sculpting the human figure. (Degree Credit) (CSU) (UC)
- ART 196HF Honors Creative Arts - Art** **3 Units**  
 54 hours lecture per term. This Honors-enhanced course explores the nature of creativity through exposure to the performing arts, literature, and the fine arts. Students will make independent investigations into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students who receive credit in this course may not receive credit in MUS 196HF or THEA 196HF. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- ART 197 F Mural and Faux Painting** **3 Units**  
**Advisory:** ART 182 F or ART 189 F.  
 36 hours lecture and 72 hours lab per term. This is an introductory course in which the fundamentals of faux (fake) finishes and mural painting will be explored. Students will learn how to execute a variety of finishes and create murals, how to bid jobs and how to work with a variety of materials. (Degree Credit)

- ART 201 F Intermediate Painting** 3 Units  
*Prerequisite(s)*: ART 189 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is a continuation of the study of painting techniques and media. Emphasis is on color theory, including use of color harmonies and creating atmospheric perspective. Recommended for art majors. (Degree Credit) (CSU) (UC)
- ART 202 F Advanced Painting I** 3 Units  
*Prerequisite(s)*: ART 201 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is a continuation in the study of painting techniques and media for the advanced student. This course is a study of painting problems including: traditional and contemporary painting composition and methods with an emphasis on concept. (Degree Credit) (CSU) (UC)
- ART 203 F Advanced Painting II** 3 Units  
*Prerequisite(s)*: ART 202 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This is a course in painting for advanced level students. Students will continue to build skills, including mastering their craft and techniques. Students will also develop competent skills in conveying challenging concepts and build a personal body of work. (Degree Credit) (CSU)
- ART 207 F Intermediate Mural and Faux Painting** 3 Units  
*Prerequisite(s)*: ART 197 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is a continuation of the study of mural painting techniques. Emphasis is on color, including use of color harmonies, rendering objects and perspective. Recommended for art majors. (Degree Credit) (CSU)
- ART 208 F Intermediate Watercolor** 3 Units  
*Prerequisite(s)*: ART 188 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is a continuation of development of watercolor techniques and processes. Emphasis is placed on understanding color and more complicated textures. (Degree Credit) (CSU) (UC)
- ART 209 F Intermediate Landscape Painting** 2 Units  
*Prerequisite(s)*: ART 190 F with a grade of C or better.  
*Advisory*: ART 182 F and ART 188 F.  
 18 hours lecture and 54 hours lab per term. This course is designed to provide students with expanded and in-depth studies of landscape painting as a continuation from ART 190 F. Students will learn to paint using transparent and opaque painting methods from direct observations using a variety of painting techniques. Students will learn techniques of handling landscape painting in oil, watercolor, or gouache. (Degree Credit) (CSU)
- ART 210 F Life Painting** 3 Units  
*Advisory*: ART 186 F and ART 189 F  
 36 hours lecture and 72 hours lab per term. This course is an introduction to painting the human figure, nude and clothed. The emphasis is on realistic representation of the human form in oils and/or acrylic paint, using structure, color, value, lighting and composition. Historical and contemporary uses of the figure in art as well as various styles of painting will be explored. (Degree Credit) (CSU) AA GE
- ART 211 F Women in the Arts** 3 Units  
 54 hours lecture per term. This course examines the achievements and contributions of women in the arts from a global perspective throughout history. Topics include patronage, gender, sexuality, and feminist theory. Pass/No Pass or Letter Grade option. (Degree Credit) (CSU) IGETC
- ART 212 F Art History - The Art of Asia** 3 Units  
 54 hours lecture per term. This course is a survey of the arts of India, China, Japan, Korea and Southeast Asia from prehistory through the 19th century. It examines the role of the visual arts in relation to society, religion, and history, while identifying major themes and techniques in these arts. Classroom presentations are supplemented by gallery and museum visits. Pass/No Pass or Letter Grade option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ARTH 130)
- ART 213 F Art History: Pre-Columbian Art** 3 Units  
 54 hours lecture per term. This course is a survey of the architecture, sculpture, painting and ceramics of Pre-Columbian Mexico, Central, North and South America from formative through post-classic times. Slide lectures, videos and museum visits will supplement the course. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- ART 214 F Perspective and Staging for Storyboarding** 3 Units  
*Prerequisite(s)*: ART 137 F or ART 182 F, with a grade of C or better.  
*Advisory*: ART 243 F, DART 100 F and DART 107 F  
 36 hours lecture and 72 hours lab per term. This course is designed to prepare and equip the art student with a functional understanding of draftsmanship and perspective as it relates to the staging/drawing of characters, animals, and vehicles in a perspective environment for storyboarding. (Degree Credit) (CSU)
- ART 215 F Beginning Storyboarding and Narrative Composition (formerly ART 090BF)** 3 Units  
*Prerequisite(s)*: ART 182 F with a grade of C or better  
 54 hours lecture per term. This course is designed to equip the art student with a functional understanding of narrative composition, storytelling, sequence design, and production skills for feature film storyboarding through focused study on narrative design and illustration, script breakdowns and storyboard development and formatting. (Degree Credit) (CSU)
- ART 216 F Advanced Storyboarding and Pre-Visual Preparation** 3 Units  
*Prerequisite(s)*: ART 182 F, ART 215 F and DART 100 F, with a grade of C or better.  
 54 hours lecture per term. This advanced course is designed to equip the art student with a functional understanding of storyboarding and production skills for animatic and pre-visualization for feature films, TV, animation, and video games through focused study on storyboarding with Photoshop software. (Degree Credit) (CSU)
- ART 217 F Children's Book Illustration (formerly ART 090DF)** 3 Units  
*Advisory*: ART 182 F and ART 186 F  
 36 hours lecture and 72 hours lab per term. This course focuses on a specific format: the page-by-page layout of "picture books" that give the reader an image on every page. It involves an understanding of the history, methods, and markets of children's books, and the components of illustrated children's stories. Emphasis is on developing an efficient creative process to produce a unified collection of images that serve a story in children's terms. This includes research and immersion in children's books to understand their forms, moods, themes, and styles; exercises to develop compositional and storytelling skills; and producing page layouts to be developed into finished art. This course will spotlight classic masters, deriving lessons from their work, processes and careers. (Degree Credit) (CSU)

**ART 218 F Visual Storytelling: Structure and Form 3 Units****Advisory:** ART 182 F or portfolio review with instructor.

36 hours lecture and 72 hours lab per term. This course will introduce students to the classic structures of story and why the visual story requires unique demands and offers unique opportunities. The camera and the image reveal structure to the audience, and the form gives meaning to the events. Students will study the forms and formats of graphic novels, animations, and films, to help them create their own story works and characters to be developed into finished visual stories. This class is recommended to first semester Visual Storytelling students but can be taken at any time. (Degree Credit) (CSU)

**ART 219 F Visual Storytelling: Image and Sequence 3 Units****Advisory:** ART 182 F or portfolio review

36 hours lecture and 72 hours lab per term. This course is an introduction to how professional visual storytellers create characters, craft story structure, design images, and assemble them in a sequence to entertain an audience. The class features analysis of master stories in visual media, and feedback on student assignments, which include developing story ideas and creating a finished image-told story "pitch" for animation or film. (Degree Credit) (CSU)

**ART 220 F Genre and Style in Entertainment Art 3 Units****Advisory:** ART 182 F and DART 100 F or portfolio review by instructor

36 hours lecture and 72 hours lab per term. This course will introduce students to the variety of genres in entertainment and visual storytelling, to offer a broad knowledge base from which to design and develop content for global markets. This course features analysis of genre elements, visual styles, and the interplay between form and content that allows genres to evolve while keeping a consistent historical continuity. Students will research a visual story genre to trace its evolution, and develop a story premise into contrasting styles. (Degree Credit) (CSU)

**ART 221 F Staging and Scene Development 3 Units****Prerequisite(s):** ART 182 F with a grade of C or better.**Advisory:** ART 243 F.

36 hours lecture and 72 hours lab per term. This course will introduce students to the techniques of story illustrators and animators of how to create scenes that hook, compel, and satisfy an audience, using the tools that writers and actors use on stage within a pictorial frame that has unique limitations, opportunities, and dynamics. The emphasis is on individual scenes, how character objectives and emotions lead to visible action, and how to frame a scene for the camera to augment the emotional effect. Lessons will apply to a variety of styles and moods of visual stories. Assignments include analysis of master scenes, creation of original scenes, and reducing multi-panel scenes to single images. (Degree Credit) (CSU)

**ART 222 F Composition for Artists: Elements and Principles 3 Units****Advisory:** ART 182 F and DART 100 F.

54 hours lecture and 72 hours lab per term. This course focuses on how master artists evoke feeling, not from the subject matter, but from the design. We will learn how image makers create work in many different styles using basic compositional principles that guide all artistic forms. (Degree Credit) (CSU)

**ART 223 F Composition for Artists: Master Studies 3 Units****Advisory:** ART 182 F and ART 222 F and DART 100 F.

36 hours lecture and 72 hours lab per term. This course is a continuation in the development of the lessons and principles presented in ART 222 F by focusing on a variety of compositional forms used in different eras and schools throughout art history. Students will be assigned a series of historical masterpieces to analyze by naming the elements used in the composition, and identifying the strategies used by the artist in applying the principles of unity and diversity. (Degree Credit) (CSU)

**ART 225 F Illustrating Literature 3 Units****Advisory:** ART 137 F or ART 182 F and ART 243 F.

36 hours lecture and 72 hours lab per term. This course focuses on adapting stories from classic literature into a unified collection of single images. Unlike graphic novel or storyboard imagery, classic book illustrations augment a story rather than tell it. This involves research and immersion in the story to understand its context, form, and themes; understanding story elements such as character crises, scenes, and beats; and image elements such as characterization, point of view, and image style. Students will develop an efficient creative process by generating multiple image options through thumbnails and comp studies before developing finished images. The course spotlights classic masters such as Gustave Dore, Edmund Dulac, Howard Pyle, N.C. Whyeth, and many others, deriving lessons from their work, processes and careers. (Degree Credit) (CSU)

**ART 236 F Intermediate Life Drawing 3 Units****Prerequisite(s):** ART 186 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This is an intermediate course in drawing the human figure. The course emphasis is on the refinement of basic skills, exercises and anatomy. Complex techniques and the continued use of the skeleton and life model to reinforce the technical skill and knowledge as it relates to gesture, structure and anatomy. Recommended for all art majors. (Degree Credit) (CSU) (UC)

**ART 241 F Typography II 3 Units****Advisory:** ART 141 F.

36 hours lecture and 54 hours lab per term. This course is an advanced course in the use of type and typography in the production of print and digital graphic design projects. (CSU) (Degree Credit)

**ART 243 F Applied Perspective 3 Units****Advisory:** ART 182 F

36 hours lecture and 72 hours lab per term. This course will introduce the student to the rules of perspective and demonstrate application methods applied to common projects within the field of entertainment, strengthening student draftsmanship. Instructor lectures and demonstrations will illustrate application methods governing the principles of mathematical perspective applied to drawing techniques. (Degree Credit) (CSU)

**ART 244 F Illustration 3 Units****Advisory:** ART 182 F

36 hours lecture and 72 hours lab per term. The lecture portion of this course covers problems of creating finished illustrations from thumbnail sketches to final art. Emphasis in this course is on illustration for printed media such as books, newspapers, and magazines, as well as conceptual design for industrial products, and illustration for the electronic entertainment, theme park, and motion picture industries. Projects are designed to prepare the student for the professional skills necessary in creating an industry appropriate portfolio of work. (Degree Credit) (CSU)

**ART 245 F Classical Cast Drawing 3 Units****Advisory:** ART 182 F and ART 186 F.

36 hours lecture and 72 hours lab per term. This course is the study and depiction of the human head and body through the process of drawing and rendering of classical cast sculpture. Drawings will be executed in a variety of media including charcoal, colored pencil, and graphite. This course is design for Art majors. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

- ART 246 F Advanced Illustration** 3 Units  
*Advisory:* ART 244 F  
 36 hours lecture and 72 hours lab per term. This advanced course presents the student with the opportunity to create an elevated and accelerated level of problem solving within the creation of finished illustrations, from thumbnail sketches to final art. Emphasis in this course is on illustration for printed media such as books, newspapers, and magazines, as well as illustration for the electronic entertainment, theme park, and motion picture industries. Projects are designed to prepare the student for the professional skills necessary in creating an industry appropriate portfolio of work. (Degree Credit) (CSU)
- ART 247 F Sketching for Animators and Illustrators - Traditional Media Techniques** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better  
*Advisory:* ART 186 F and ART 243 F  
 36 hours lecture and 72 hours lab per term. This course will introduce the student to the professional application practices of using traditional media techniques for developing artwork for the fields of entertainment. Areas of focus include rapid visualization to final art production using watercolor, markers, pen, ink, and color pencil. (Degree Credit) (CSU)
- ART 254 F Advanced Ceramics** 3 Units  
*Prerequisite(s):* ART 155 F or ART 154 F, with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is an advanced study of hand building and/or wheel throwing techniques, design of form, and surface decoration. Kiln operation is also emphasized. Development of refined skills, expanded knowledge, and a higher level of conceptual ability is accomplished through individually determined projects. (Degree Credit) (CSU)
- ART 258 F Tile I** 3 Units  
*Advisory:* ART 120 F and ART 153 F  
 36 hours lecture and 72 hours lab per term. This course is an introduction to ceramic tile making techniques. Emphasis is placed on tile design and its purpose, production, and finish. Multiple methods of production and decoration will be covered as well as basic setting procedures. In addition, review of historical and traditional models and their relevance to contemporary tile design and tile making will be included. (CSU)
- ART 259 F Tile II** 3 Units  
*Prerequisite(s):* ART 258 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is an advancement into ceramic tile design and production techniques. Emphasis is placed on development of the tile designs that are more advanced in both design and finish while having the student develop a personal approach to the medium. (Degree Credit) (CSU)
- ART 260 F Tile III** 3 Units  
*Prerequisite(s):* ART 259 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is a deeper exploration into ceramic tile design and production techniques. Emphasis is placed on development of tile designs that are challenging in scope and scale while having the student hone their own personal approach to the medium. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- ART 261 F Sculpture - Ceramics** 3 Units  
*Prerequisite(s):* ART 153 F or ART 160 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is an exploration of the methods, limitations and characteristics of various clays when used to create sculpture in the round and bas-relief. (Degree Credit) (CSU) (UC)
- ART 262 F Cast Metal: Intermediate** 3 Units  
*Advisory:* ART 162 F  
 36 hours lecture and 72 hours lab per term. This course is designed for the student to acquire improved skills in the concepts of cast metal sculpture. Student will employ and refine skills in lost wax bronze casting process. This class includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. (Degree Credit) (CSU)
- ART 263 F Cast Metal: Advanced** 3 Units  
*Prerequisite(s):* ART 262 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This is an advanced course investigating the concepts of cast metal sculpture. Students will create work using the lost wax bronze casting process. This class includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. The complexity of the designs requires alternative skills, techniques and materials. (Degree Credit) (CSU)
- ART 264 F Cast Metal: Studio Concepts** 3 Units  
*Prerequisite(s):* ART 263 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is an advanced investigation into the concepts of cast metal sculpture. Students will employ lost wax bronze casting process. This course includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. In consecutive semesters, the complexity of the projects require alternative skills, techniques and materials. (Degree Credit) (CSU)
- ART 268 F Advanced Sculpture II** 3 Units  
*Prerequisite(s):* ART 161 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is an investigation of advanced sculptural concepts with an emphasis on the development of an individual body of work. This course advances the research, execution, and artistic intention of a body of work. Class requirements are arranged by contract to allow a wide diversity of projects. (Degree Credit) (CSU)
- ART 271 F Fabrication III: Mold Making, Casting and Vacuum Forming** 3 Units  
 36 hours lecture and 72 hours lab per term. This course teaches both principles and practical application of mold making, casting and vacuum-forming for the reproduction of prototypes. From health and safety consideration, tools, materials and their application, students will have extensive hands-on practice, allowing them to acquire experience necessary to advance in the creative industries of their choice. (Degree Credit) (CSU)
- ART 273 F Intermediate Jewelry Casting** 3 Units  
 36 hours lecture and 72 hours lab per term. This intermediate course focuses on concepts and techniques acquired in previous exercises, in the designing of wax models and casting of fine art jewelry and small objects. This course involves advanced problems in casting. (Degree Credit) (CSU)
- ART 274 F Advanced Jewelry Casting** 3 Units  
*Advisory:* ART 173 F.  
 36 hours of lecture and 72 hours lab (studio) per term. This advanced jewelry course focuses on concepts and techniques that are essential in refined levels of jewelry design. The progression of skills is necessary for the success of the advanced student in jewelry casting. (Degree Credit) (CSU)
- ART 275 F Studio Concepts: Jewelry Casting** 3 Units  
*Advisory:* ART 173 F  
 36 hours lecture and 72 hours lab per term. This course focuses on acquiring skills, concepts, and techniques that are essential in the highest levels of jewelry casting. This course also focuses on the development of a portfolio of design, drawings, wax models, molds and cast metal Fine Art Jewelry. (Degree Credit) (CSU)

- ART 276 F Advanced Jewelry Fabrication** 3 Units  
*Prerequisite(s):* ART 175 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course builds on skills on previous skills, design concepts and information gained in ART 175 F. In addition to the refinement of previous skills, use of mechanically-formed components are used in combination. (Degree Credit) (CSU)
- ART 277 F Studio Concepts: Jewelry Fabrication** 3 Units  
*Prerequisite(s):* ART 276 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course focuses on previous exercises and further emphasis is on technical skill in jewelry fabrication, development of a portfolio with presentation of jewelry designs, working drawings, renderings, and fabricated metal fine art jewelry. (Degree Credit) (CSU)
- ART 278 F Intermediate Stained Glass** 3 Units  
*Prerequisite(s):* ART 176 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course demonstrates further progress in developing the skill of contemporary and traditional processes in cold glass within the "Tiffany Foil" techniques of overlay and sandblasting. The student will also be introduced to the hot glass processes of fusing, slumping, and glass painting. The hot glass process will include both kiln and torch work. Project emphasis will be in the design and fabrication of three dimensional and large scale projects in both hot glass and cold glass. (Degree Credit) (CSU)
- ART 280 F Rendering II** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is a continuation of the focus and skill-building of the first Rendering course. The main objective of this course is creating the illusion of three dimensions on a two-dimensional drawing surface. The work covers the visual perception of space, and the artistic techniques based on it. Rendering topics include explanations of the surface qualities of various materials, and the accurate depiction of the materials' interaction with light. This course also meets student needs in advertising, illustration and industrial design. Field trips may also be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- ART 281 F Drawing from the Masters II** 3 Units  
*Advisory:* ART 182 F and ART 186 F.  
 54 hours lecture per term. This course covers working methods and media of master draftsmen from the 18th through the 21st centuries. There is an emphasis on analyzing and copying master drawings in a variety of media. Further emphasis is placed on the traditional approach to drawing as practiced by masters such as Daumier, Degas, Goya, Sargent, Homer, and illustrators from the Golden Age of American Illustration. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- ART 285 F Intermediate Life Sculpture** 3 Units  
*Prerequisite(s):* ART 185 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This is an intermediate level course in Life Sculpture. This course is focused on a review of sculpture exercises in figurative sculpture with emphasis on refinement of accurate anatomical sculpture. (Degree Credit) (CSU)
- ART 286 F Advanced Life Drawing** 3 Units  
*Prerequisite(s):* ART 236 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This is an advanced course in drawing the human figure, the emphasis of this course is a focused review of previous drawing exercises and the refinement of techniques. Advanced studio problems will be addressed, with historical and contemporary examples. Recommended for art majors. (Degree Credit) (CSU) (UC)
- ART 287 F Advanced Life Sculpture** 3 Units  
*Prerequisite(s):* ART 285 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course focuses on previous exercises and further development of advanced skills and techniques used in the sculpting of accurate human anatomy with consistent detail. (Degree Credit) (CSU)
- ART 288 F Advanced Life Sculpture II** 3 Units  
*Prerequisite(s):* ART 287 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course focuses on the previous exercises and further development of sculpture, skills, techniques and fine detail used in accurate human anatomy. Further development of the figure in bas-relief will be explored. (Degree Credit) (CSU)
- ART 290 F Portfolio Preparation and Artwork Presentation** 3 Units  
*Advisory:* Six units of art, design or computer graphics (DART) courses  
 54 hours lecture per term. This course will help studio arts and design majors in the creation of a portfolio that will assist in the transfer towards a BA or BFA university art program. Major emphasis is placed on the development of a professional portfolio and the quality of the artwork in it. (Degree Credit) (CSU)
- ART 291 F Applied Painting: Expressive** 3 Units  
*Prerequisite(s):* ART 189 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This class surveys a variety of painting styles. Emphasis is on emotionally and expressive interpretation of an object or idea through use of color, composition and paint application. Fundamental painting skills, will be needed. Classic and contemporary approaches will be applied. (Degree Credit) (CSU)
- ART 292 F Painting: Political and Social Issues** 3 Units  
*Prerequisite(s):* ART 189 F with a grade of C or better.  
 26 hours and 72 hours lab per term. This course is to give students the tools for communicating ideas, concepts, observations and opinions through painting, using style, compositions, application of paint and mixed media. Classic and contemporary approaches will be applied to this subject matter. (Degree Credit) (CSU)
- ART 293 F Painting: Narrative** 3 Units  
*Prerequisite(s):* ART 189 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course surveys a variety of painting styles to give students the tools for communicating a narrative theme through painting. (Degree Credit) (CSU)
- ART 294 F Independent Study: Illustration** 1-2 Units  
*Prerequisite(s):* ART 244 F and ART 246 F, with a grade of C or better  
 54-108 hours independent study per term. This independent study course is for the student who wishes to pursue a more thorough understanding of the field of Illustration through application of creative design, technical ability, and execution of craft. Instructor approval is required. (Degree Credit) (CSU) (UC review required)
- ART 295 F Independent Study: Painting** 1-2 Units  
*Prerequisite(s):* ART 188 F or ART 201 F, with a grade of C or better  
*Advisory:* ART 120 F  
 54-108 hours independent study per term. This course is for the advanced student who wishes to pursue painting through individual study. Instructor approval is required. (Degree Credit) (CSU) (UC review required)
- ART 296 F Independent Study: Museum Studies** 1-2 Units  
*Prerequisite(s):* ART 122 F with a grade of C or better  
 54-108 hours independent study per term. This course is for students who wish to pursue museum studies through individual study. Students will pursue a more thorough understanding of the field of museum studies through application of skills to gallery and permanent collection projects. Instructor approval is required. (Degree Credit) (CSU) (UC review required)



**ART 297 F Independent Study: Ceramics 1-2 Units**

**Prerequisite(s):** ART 254 F or ART 260 F with a grade of C or better  
54-108 hours independent study per term. This course is for students who wish to pursue ceramics through individual study. Students will plan an appropriate project or group of projects that allow greater development and understanding of the ceramic process through applied practice of the specific techniques chosen by the student. Instructor approval is required. (Degree Credit) (CSU) (UC review required)

**ART 298 F Arts Internship 2-4 Units**

**Advisory:** 6-9 units of art courses which may include art history, design, studio art, business practices in art, portfolio preparation or digital art. 18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide professional artistic work experience directly related to the student's area of study. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills. This course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

**ART 299 F Art Independent Study 1-2 Units**

**Prerequisite(s):** A grade of C or better in at least one semester's previous work in the subject of the independent study as well as a foundation in creative design, technical ability, and execution of craft. 54-108 hours independent study per term. This course is for students who wish to pursue a particular area of art through individual study. Instructor approval is required. (Degree Credit) (CSU) (UC Credit Limitation)

## Automotive (AUTO)

**AUTO 050 F Automotive Specialty Practice 2 Units**

**Corequisite(s):** AUTO 060 F or AUTO 065 F or AUTO 070 F or AUTO 073 F or AUTO 081 F or AUTO 082 F or AUTO 083 F or AUTO 084 F or AUTO 086 F or AUTO 088 F or AUTO 089 F or AUTO 090 F or AUTO 091 F, with a grade of C or better or Pass.

18 hours lecture and 72 hours lab per term. In this course, emphasis is placed on the development and reinforcement of automotive repair skills in the area of student interest and advanced level of study. Lectures cover automotive repair procedures, service department operation, organization, support staff, repair documentation, technician certification and customer satisfaction. (Degree Credit)

**AUTO 051 F Internship in Automotive 2-4 Units**

**Prerequisite(s):** Completion of at least two Automotive Technology courses.  
18 hours lecture and 60-180 lab/unpaid internship or 75-225 hours of paid internship per term in an automotive dealership or other automotive-related facility. This course requires supervised work experience each week to earn credits above the one unit of classroom lecture. The supervised work experience is at an automotive repair facility or related automotive business and subject to NOCCCD Board of Trustee approval. This course is designed to provide learning opportunities and earned college units through internship hours in the Career Technical Education field of Automotive Technology. No more than four units total (lecture and internship) may be applied toward the degree or certificate.

**AUTO 055 F Automotive Business Management 5 Units**

**Advisory:** AUTO 131 F with a grade of C or better or equivalent work experience.

72 hours lecture and 54 hours lab per term. This course covers the automotive service management operation associated with an automotive business and dealership. Instruction focuses on the repair order as a legal document, appointment systems, telephone skills, warranties, communication strategies, product knowledge, selling skills, proactive customer handling, and multiple ways to reduce costs and improve profits.

**AUTO 060 F Automotive Powertrains 5 Units**

**Advisory:** AUTO 131 F or equivalent work experience.

72 hours lecture and 72 hours lab per term. This course covers the repair of rear wheel drive (RWD) manual transmissions, front wheel drive (FWD), manual transmissions, clutches, transfer cases, and differentials. Instructional emphasis is placed on the principles, theory, and operation of gears, bearings, drive lines, universal joints, CV joints, drive train electrical/electronic systems, and rear axles. The student will be assigned and perform hands-on.

**AUTO 065 F Automotive Electrical and Electronic Systems 5 Units**

**Advisory:** AUTO 131 F or equivalent work experience.

72 hours lecture and 72 hours lab per term. This is an introductory course in the theory of electrical systems and electronic control of the modern automobile. This course covers basic electrical and electronic concepts, batteries, starting and charging systems, body computer systems, passive restraint systems, and diagnostic strategies. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Electrical Systems (A6) examination.

**AUTO 070 F Engine Reconditioning 7 Units**

**Prerequisite(s):** AUTO 081 F with a grade of C or better or equivalent work experience.

108 hours lecture and 54 hours lab per term. This course covers the operating principles, nomenclature, design, inspection, diagnostic mechanical repair procedures of automotive engines. This course offers time management, critical thinking, applied mathematics, applied physics, communication, and lifelong experiences through comprehensive and relevant laboratory projects.

**AUTO 072 F Automotive Engine Performance 7 Units**

**Advisory:** AUTO 131 F

108 hours lecture and 54 hours lab per term. This course covers engine tune-up, diagnosis, and repair of the electronic ignition system, emissions control system, and electronic powertrain management systems, including electronic fuel injection. Instruction will be given to prepare the student for the National Institute of Automotive Service Excellence (ASE) Engine Performance (A8) test. Modern test equipment will be utilized in the lab sessions.

**AUTO 073 F Brake Systems Repair 7 Units**

**Prerequisite(s):** AUTO 083 F with a grade of C or better or equivalent work experience.

108 hours lab and 54 hours lab per term. This course covers the operation, nomenclature, diagnosis, adjustment and repair procedures of automotive brake systems including electronically controlled anti-lock braking systems. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Brakes (A5) examination.

**AUTO 081 F Engine Rebuilding and Repair****8 Units****Advisory:** AUTO 131 F or equivalent work experience.

108 hours lecture and 108 hours lab per term. This course covers operating principles, nomenclature, design, and repair procedures of the modern automotive engine. Laboratory project emphasis is upon procedures of rebuilding an engine while out of the vehicle. Instruction will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Engine Repair (A1) examination.

**AUTO 082 F Engine Performance and Drivability****8 Units****Advisory:** AUTO 131 F

108 hours lecture and 108 hours lab per term. This course covers the operation, design, diagnosis, and repair of computerized engine management systems. Systems covered include induction, exhaust, input sensors, fuel delivery, fuel injection, ignition, and on-board diagnostics (OBD-II). Diagnostic strategies utilizing scan tools and lab scopes will be covered. Instruction will closely parallel topics addressed on the National Institute of Automotive Excellence (ASE) A8 Engine Performance examination.

**AUTO 083 F Brake and Suspension Systems Repair****8 Units****Advisory:** AUTO 131 F or equivalent

108 hours lecture and 108 hours lab per term. This course covers the operation, nomenclature, adjustment and repair procedures of automotive brake, suspension, and steering systems. Instruction will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Suspension and Steering (A4) and Brakes (A5) examinations. (Degree Credit)

**AUTO 084 F Automatic Transmissions****8 Units****Advisory:** AUTO 131 F or equivalent work experience.

108 hours lecture and 108 hours lab per term. This course will review the fundamentals of hydraulic systems, control valves, torque converters, planetary gear sets, clutches, bands, fluids, and filters. After this review of fundamental theory and operation, students will transition to testing, diagnosis, maintenance, and rebuilding of various types of automatic transmissions including electronically controlled transmissions and transaxles. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Automatic Transmission/Transaxle (A2) Examination. Field trips may be optional outside regularly-scheduled class times. (Degree Credit)

**AUTO 086 F Automatic Transmission Fundamentals****3 Units****Advisory:** AUTO 131 F or equivalent work experience.

36 hours lecture and 54 hours lab per term. This course covers the fundamentals of hydraulic systems, control valves, torque converters, planetary gear sets, clutches, bands, fluids, and filters. Preventative maintenance and diagnostic procedures will be discussed in lecture and laboratory activities with an emphasis on rear wheel drive transmissions. Instruction will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Automatic Transmission and Transaxle (A2) examination (Degree Credit).

**AUTO 088 F Fuel Systems and Advanced Drivability Diagnosis****4 Units****Advisory:** AUTO 131 F or equivalent work experience.

54 hours lecture and 54 hours lab per term. This course's instruction includes the theory and principles of carburetors, electrical systems, ignition systems, fuel injection systems, engine powertrain control systems, and the inspection and repair of automotive emission control systems. Modern diagnostic equipment including the exhaust gas analyzer, digital meters, scan tools, and digital storage oscilloscopes will be used in lab sessions. This course helps to prepare a student for The State of California Smog Check Inspector License Examination and for the National Institute for Automotive Service Excellence (ASE) A8 and L1 tests. (Degree Credit)

**AUTO 089 F Automotive Air Conditioning****4 Units****Advisory:** AUTO 131 F or equivalent work experience.

54 hours lecture and 54 hours lab per term. This course covers the theory and principles of automotive air conditioning, including service, maintenance, diagnosis and repair. Students will be given the opportunity to earn the MACS 609 Certification through proctored examination. Topics addressed on the ASE Heating and Air Conditioning Test (A7) will be emphasized. (Degree Credit)

**AUTO 090 F Emission Control Systems and Advanced Diagnosis****6 Units****Advisory:** AUTO 131 F or equivalent work experience.

90 hours lecture and 54 hours lab per term. This course's instruction includes the theory and principles of automotive ignition systems, electrical systems, emission control systems, fuel injection systems, and California Smog Inspection Procedures. Instructional emphasis is on information needed to prepare for The State of California Smog Check Inspector and/or Smog Check Repair Technician License Examinations and the National Institute for Automotive Service Excellence (ASE) A8 and L1 tests. Modern diagnostic equipment including the exhaust gas analyzer, scan tools, digital meters, and engine oscilloscopes will be used in laboratory sessions. (Degree Credit)

**AUTO 091 F Cylinder Head Repair****4 Units****Advisory:** AUTO 131 F or equivalent work experience.

54 hours lecture and 54 hours lab per term. This course covers operating principles, nomenclature, design and repair procedures of modern cylinder heads. Emphasis is on cylinder head repair procedures that are performed by automotive repair shops, including diagnosis, bench work, removal and installation.

**AUTO 096 F Performance Technology****4 Units****Advisory:** AUTO 131 F

54 hours lecture and 54 hours lab per term. This course covers the practical applications of performance and durability pertaining to motorized vehicles. Topics include areas of engine, drivelines, brakes, and suspension necessary for better performance and increased safety and durability.

**AUTO 131 F Automotive Fundamentals****4.5 Units**

72 hours lecture and 36 hours lab per term. This course emphasizes basic operating principles, nomenclature, preventative maintenance, inspection, and minor repair procedures. (Degree Credit) (CSU)

## Biology (BIOL)

**BIOL 100 F Principles of Biology****4 Units**

72 hours lecture per term. This course is an introductory non-majors course that will 1) emphasize the fundamental understanding of basic biological principles, 2) illustrate the structure and function of living organisms and their relationship to the physical world, and 3) develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Topics include 1) the structure and function of life at the cellular and organismic levels, 2) metabolism, photosynthesis and energetics, 3) cell division and animal development, 4) classical and molecular genetics, 5) biotechnical development and applications, 6) evolution and adaptations of living organisms, and 7) ecological relationship and environmental conservation. (Degree Credit) (CSU) (UC Credit Limitation: BIOL 100 F and 101 F combined: maximum credit one course; no UC credit if taken after BIOL 170 F or a 200-level biology course) AA GE, CSU GE, IGETC

**BIOL 101 F General Biology****5 Units**

72 hours lecture and 54 hours lab per term. This integrated lecture-lab course is an introductory non-majors course that will emphasize basic biological principles, illustrate the structure and function of living organisms and their relationship to the physical world, and develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC; no UC credit if taken after BIOL 170 F or a 200-level biology course) AA GE, CSU GE, IGETC

**BIOL 101HF Honors General Biology****5 Units**

72 hours lecture and 54 hours lab per term. This Honors-enhanced course is an introductory non-majors course that will emphasize the fundamental understanding of basic biological principles, illustrate the structure and function of living organisms and their relationship to the physical world, and develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Lecture topics include the structure and function of life at the cellular and organismal level, metabolism, photosynthesis and energetics, cell division and animal development, classical and molecular genetics, developments and applications in biotechnology, evolution and adaptations of living organisms, and ecological relationships and environmental conservation. Field trips may be required outside regularly scheduled class times. (Degree Credit) (CSU) (UC; no UC credit if taken after a 200 level Biology) AA GE, CSU GE, IGETC

**BIOL 102 F Human Biology****3 Units**

54 hours lecture per term. This course is designed to study modern biological concepts presented in a human context. Concepts include biological chemistry, cellular basis of life, energetics, cell cycle, anatomy, physiology, reproduction, development, genetics, demography, ecology and evolution. Included in the course are discussions of current topics on environmental, nutritional and public health issues as they relate to the human condition. (Degree Credit) (CSU) (UC; no UC credit if taken after BIOL 170 F or a 200-level biology course) AA GE, CSU GE, IGETC

**BIOL 102LF Human Biology Laboratory****1 Unit**

**Corequisite(s):** BIOL 102 F with a grade of C or better.

54 hours lab per term. This lab course supplements the BIOL 102 F lecture. This is a general education course for non-biology majors providing direct participation in experiments, demonstrations and discussions. Topics include: elements of human anatomy and physiology, fitness, nutrition, disease, elements of human heredity and environmental adaptations. (Degree Credit) (CSU) (UC; no UC credit if taken after a 200-level Biology course) CSU GE, IGETC

**BIOL 104 F Biology of Insects and Spiders****3 Units**

54 hours lecture per term. This course familiarizes students with basic biological principles as illustrated by insects and spiders. Special emphasis is placed on their relations to plants and animals including humans. Living and preserved insects and spiders and many other visual aids will be used to help describe in detail life cycles, evolution, adaptations to local environment and the major taxonomic groups. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**BIOL 108 F Plants and People****3 Units**

54 hours lecture per term. This course is the study of basic plant biology and the history and uses of plants and plant products by human societies. Plants that have played major roles in the molding of human society and civilization are studied. This course will also cover the changes made by human civilizations to plant morphology and physiology. Lectures are integrated with discussion, demonstration and hands-on learning activities. Specific topics include plant structure, function, origins of agriculture and domestication. Historical and contemporary uses of important plant products such as drugs, medicines, oils, resins, beverages, foods and industrial products are included. The nutritional values of major food plants are evaluated. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**BIOL 109 F Genetics and Biotechnology in Society****3 Units**

54 hours lecture per term. This introductory survey course will cover the basic concepts and experiments of transmission genetics and molecular biology. The applications, social consequences and ethical implications of reproductive technology, genomics and biotechnology in medicine and agriculture are also addressed. (Degree Credit) (CSU) (UC; no UC credit if taken after BIOL 170 F or a 200-level Biology course) AA GE, CSU GE, IGETC

**BIOL 109LF Biotechnology Lab Techniques****2 Units**

108 hours lab per term. In this course, students will learn skills and gain experience with tools of the molecular biology lab. Students will learn safety, sterile technique, solution preparation, record keeping, proper use of instruments, bacterial culture, recombinant DNA cloning, protein purification and applications on the computer. Class emphasizes practical hands-on experience and an understanding of the basic principles behind the technologies. (Note: BIOL 109 F is not required to take this course) (Degree Credit) (CSU)

**BIOL 141 F Marine Mammal Biology and Conservation****3 Units**

54 hours lecture per term. This course will provide an overview of the diversity of marine mammal species, along with their natural history, behavior, physiology, and ecology. It will introduce students to the techniques used to study marine mammals, and their applications to conservation and management issues. Required field trips are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**BIOL 170 F Organismal Biology****5 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or assessment through the college's multiple placement processes.

**Advisory:** BIOL 101 F or BIOL 190 F and BIOL 190LF or AP Biology with a grade of 3 or better on the placement exam.

72 hours lecture and 54 hours lab per term. This course is designed to familiarize students with the diversity and biology of living organisms. Integrated lab and lecture sessions emphasize the classification of organisms with respect to the evolution of anatomical and physiological adaptations. This class is designed for Biological Science majors in transfer programs. Field trips outside regularly-scheduled class times are required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: BIOL 140)

**BIOL 190 F Introduction to Biotechnology****3 Units**

54 hours lecture per term. This course will teach students about all aspects of the biotechnology field, with content appropriate for a wide range of students and professionals. Topics will include the biology, business and legal/ethical issues surrounding biotechnology, cells, genes, DNA, proteins, genetic engineering, drug development, biofuels, agriculture, bioremediation, biotechnology company structure, and the regulations affecting the field. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

- BIOL 190LF Introduction to Biotechnology Lab** **1 Unit**  
**Corequisite(s):** BIOL 190 F with a grade of C or better.  
 54 hours lab per term. This course prepares students for entry-level work in the biotechnology industry by emphasizing the basic concepts needed to work effectively in a bioscience laboratory. Topics include laboratory math, basic chemistry of buffers, health and safety, metrology, quality control, biological molecules, gene expression, cell structure and molecular biology techniques. This course introduces students to basic biotechnology laboratory skills including basic separation methods, aseptic technique and documentation. Good communication and work-readiness skills are emphasized. (Degree Credit) (CSU) (UC) IGETC
- BIOL 191 F Biotechnology A - Basic Laboratory Skills** **4 Units**  
 54 hours lecture and 54 hours lab per term. This course provides an introduction to the fundamental skills necessary for any biotechnology laboratory. Skills include maintenance of an industry standard notebook; preparation and sterilization of solutions, reagents, and media; utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, and laboratory safety regulations. Compliance with industry standards and regulations will be incorporated into course procedures. (Degree Credit) (CSU)
- BIOL 192 F Biotechnology B - Protein Biochemistry** **4 Units**  
**Prerequisite(s):** BIOL 191 F with a grade of C or better  
 54 hours lecture and 54 hours lab per term. This course covers fundamental skills in applied biotechnology necessary for any biotechnology laboratory but particularly focuses on downstream manufacturing processes in biomanufacturing. Skills include maintenance of an industry standard notebook, preparation and sterilization of solutions, reagents and media, utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, lab safety regulations, in vitro translation, large scale expression, purification, modification, western blot analysis, ELISA, antibody tagging, and fluorescent microscopy. (Degree Credit) (CSU)
- BIOL 193 F Biotechnology C - Molecular Biology** **4 Units**  
**Prerequisite(s):** BIOL 191 F with a grade of C or better  
 54 hours lecture and 54 hours lab per term. This course introduces the fundamental skills in any biotechnology laboratory focusing on the upstream research and development process. Skills include the maintenance of an industry standard notebook, preparation and sterilization of solutions, reagents, and media, utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, lab safety regulations, DNA/RNA extraction and purification, bioinformatics, polymerase chain reaction, electrophoresis, DNA sequencing, recombinant DNA technology, DNA cloning, transformation, in vitro transcription, fluorescence in situ hybridization, and Southern blot analysis. Compliance with industry standards and regulations will be incorporated into course procedures. (Degree Credit) (CSU)
- BIOL 194 F Quality and Regulatory Compliance in the Biosciences** **2 Units**  
 36 hours lecture per term. This course will cover quality assurance and regulatory compliance for the bioscience industries. Topics will span quality control and Federal Drug Administration (FDA) regulations for the biotechnology, biopharmaceutical, biomedical device and food industries. Theories and application of quality assurance and quality control will be presented and several different quality systems will be discussed such as CGMP (Good Manufacturing Practices), ISO9000 (International Standards Organization), Six Sigma and Lean. (Degree Credit) (CSU)
- BIOL 196 F Tissue Culture Methods** **2 Units**  
**Prerequisite(s):** BIOL 191 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course provides theoretical and practical knowledge and skills on how to culture eukaryotic cells. Students acquire practical and theoretical knowledge of the structure, equipment, and sterile techniques of the cell culture laboratory, the growth conditions of cells, and how scientists attempt to mimic this in cultures. Among the topics covered are the composition of cell culture media, establishment of primary cultures and cell lines from normal tissue and cancer tissue, routine cultivation of cells, long-term storage, contamination, various methods for characterization of cells, transfection, and the use of cells in culture to resolve various issues in basic and applied research. (Degree Credit) (CSU) (C-ID: BIOT 230BX)
- BIOL 222 F Marine Biology** **3 Units**  
**Prerequisite(s):** A biological science laboratory course with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course presents an overview of life in the sea. Lectures, labs and fieldwork provide an introduction to the diversity of marine organisms and the physical and biological processes that influence their structure, life history, behavior, and distribution. An emphasis is placed on the interactions of these organisms and processes in a variety of marine habitats. Marine ecology and conservation are also discussed. Both lab and field exercises will be used to provide hands-on experience with marine organisms, habitats, and research techniques. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- BIOL 266 F General Zoology** **5 Units**  
 54 hours lecture and 108 hours lab per term. This course is designed to familiarize students with the animal kingdom. Integrated lab and lecture sessions emphasize the evolution of anatomical, physiological and behavioral adaptations. This class is designed for Biological Science majors in transfer programs. (Degree Credit) (CSU) AA GE, CSU GE
- BIOL 268 F General Botany** **5 Units**  
**Prerequisite(s):** BIOL 111 F with a grade of C or better.  
 54 hours lecture and 108 hours lab per term. This course is a study of structure and function of roots, stems, leaves, flowers, fruits, and seeds of the flowering plants. Characteristics and life cycles of some of the algae, fungi, mosses, ferns, club mosses, and cone-bearing plants are covered. Environmental relationships, classification, genetics, propagation, and the applications of these to agriculture and forestry are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- BIOL 272 F Cell and Molecular Biology** **4 Units**  
**Prerequisite(s):** BIOL 170 F and CHEM 111AF with a grade of C or better  
 54 hours lecture and 54 hours lab per term. This course is designed for Biological Sciences majors in transfer programs. Integrated lectures and labs cover the principles and applications of prokaryotic/eukaryotic cell structure and function, biological molecules, cell reproduction and controls, molecular genetics, classical/Mendelian genetics, cell transport, cell metabolism and cellular communication. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- BIOL 274 F General Ecology** **4 Units**  
**Prerequisite(s):** BIOL 170 F with a grade of C or better  
 54 hours lecture and 54 hours lab per term. This course is designed to familiarize students with basic principles governing interactions between organisms and the environment. Integrated lectures, field trips, and lab sessions emphasize basic ecological principles and relationships. These include identification of plants and animals, community analysis, environmental survey techniques, laws of thermodynamics, behavioral and physiological adaptations of organisms, and ecological models. Field trips, including an overnight trip, are required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**BIOL 276 F Genetics and Evolutionary Biology** **4 Units**

**Prerequisite(s):** BIOL 272 F with a grade of C or better  
54 hours lecture and 54 hours lab per term. This course is a comprehensive survey of the processes and products of genetics. Through a review of experimental evidence, students evaluate the basic tenets of molecular, transmission and population genetics, and use the science of genetics to appraise the relationship of genetics to the processes and products of microevolution and macroevolution. Lab topics include DNA replication/repair, transcription and translation and regulation of gene expression. The philosophy and methods of science, as well as the theory of evolutionary thought are integrated throughout. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC)

**BIOL 297 F Biosciences Internship** **2-4 Units**

18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in Biology or Biotechnology. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers in the biosciences. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internships. (Degree Credit) (CSU)

**BIOL 299 F Biological Science Independent Study** **1 Unit**

**Prerequisite(s):** A 200-level course in the biological sciences with a grade of "B" or better  
54 hours independent study per term. This course involves lab and/or field investigations under the guidance of members of the life sciences faculty. Hours to be arranged. Primarily for majors in life sciences who wish to increase their knowledge of the sciences through individual study and small group conferences. Independent research problems with staff supervision may be approved. Outside reading and written report required. Elective credit in the sciences area. (Degree Credit) (CSU) (UC review required)

## Business Management (BUS)

**BUS 021 F The Securities Market** **1 Unit**

Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course provides an overview of the securities market. Topics to be discussed include types of markets, economic benefits, regulation, types of securities, participants in the market, brokerage houses, types of trades and orders, sources of investment information, and services offered by various types of investment professionals.

**BUS 022 F Common Stock** **1 Unit**

Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course is an introduction to fundamental and technical analysis as it relates to common stock. Topics to be discussed include total return concept, return-risk characteristics, rights of stockholders, advantages and disadvantages of stock ownership, and basic valuation methods. An introduction to technical analysis with emphasis on chart patterns and technical indicators is also covered.

**BUS 023 F Fixed Income Securities** **1 Unit**

Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course covers the different types of fixed-income securities and their characteristic features, the rights of security holders, and basic valuation approaches.

**BUS 024 F Stock Options** **1 Unit**

Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course provides an introduction to puts and call options. Topics to be discussed include the options market, mechanics of investing in options, basic options strategies, and return-risk characteristics.

**BUS 025 F Investment and Retirement Plans** **1 Unit**

Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course provides the fundamental concepts of mutual fund investing. The different types of investment companies, unique features, and advantages and disadvantages are covered. An overview of tax-deferred retirement plans is presented. Focus will be on managing self-directed IRAs and Keogh Plans.

**BUS 100 F Introduction to Business** **3 Units**

54 hours lecture per term. This course is an introduction to the trends and opportunities in today's dynamic global business environment surveying economics, global markets, social responsibility, ownership forms, entrepreneurship, management organization, marketing, accounting and financial management. (CSU) (UC) AA GE, CSU GE (C-ID: BUS 110)

**BUS 101 F Personal Financial Management** **3 Units**

**Prerequisite(s):** MATH 020 F with a grade of C or better, or any previous algebra course or math skills clearance.

54 hours lecture per term. This course covers the proper management of personal incomes and expenditures, practice computational skills, preparation to reason quantitatively, and explain and apply mathematical reasoning concepts to solve problems experienced in daily or professional life-related to money/finance. This course also includes a study of inflation and business cycles; commercial and savings accounts; budgets, charge accounts, installment buying, and borrowing money; property, income, estate, inheritance, and gift taxes; life, health, accident, property and miscellaneous insurance; pension plans and Social Security; owning a home; investing in securities; and trust funds and wills. This course is an integrative approach to personal finance focusing on practical financial decision making as well as the social, psychological, and physiological contexts in which those decisions are made. Students will perform calculations to analyze their savings, investments, budgets and develop a plan to meet financial goals. (Degree Credit) (CSU) CSU GE, AA GE

**BUS 106 F Business City Field Trip** **1 Unit**

18 hours lecture per term. This course features business-focused city tours to domestic and international locations and offers unique in-the-field learning opportunities. In this course, students travel to the designated location and will be lodged and participate in lectures, discussions with business executives of local firms, connect with locals to understand social and cultural norms and local practices and site visits to local and regional companies showcasing various industries including local culture, entrepreneurship, global import/export, and international business. The selected location, schedule, costs associated with the trip, and additional course travel details will be on the schedule and online at [buscis.fullcoll.edu](http://buscis.fullcoll.edu). (Degree Credit) (CSU)

**BUS 108 F Living in an Online World** **3 Units**

54 hours lecture per term. This course considers human behavior in relation to the challenges and opportunities presented by an increasingly online society. It places special emphasis on critically evaluating and managing one's online presence within this environment in a healthy way throughout various life stages. This course explores various aspects of our lives: physical, mental, emotional, and social consequences and opportunities for individuals, companies, and societies that result from the global use of the Internet in everyday personal and business life. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 110 F Business English****3 Units**

54 hours lecture per term. This course is an English review course intended for the business student. Practice is provided in essentials of grammar, punctuation, English usage, capitalization, number usage, sentence structure, and spelling. Principles of letter writing are introduced. (CSU)

**BUS 111 F Business Communications****3 Units**

**Prerequisite(s):** ENGL 060 F or ENGL 099 F or ESL 186 F, with a grade of Pass or a recommended score on the English Placement Test.

54 hours lecture per term. This course provides instruction and practice in writing in English usage, writing business letters, interoffice memoranda, and reports, Business English, mechanics, and appearance. Included are letters of inquiry, order and acknowledgement, sales, application, claims and adjustment and collection. One original research report is required. Meeting the needs of the readers underlies each section of study. (Degree Credit) (CSU) CSU GE, AA GE

**BUS 112 F Public Speaking for Business****4 Units**

**Advisory:** ENGL 100 F or ENGL 100HF or BUS 111 F, with a grade of C or better, or recommended score on the English Placement test.

72 hours lecture per term. This course is an introduction to public speaking and presentation methods. This course covers a variety of business-related public speaking styles and formats. Emphasis will be placed on preparing logical, well-organized, accurate verbal communication. Critical evaluation, reporting and listening skills will also be a focus. Students will learn how to use technology to create audio-visual aids, as well as speaker outlines/notes and audience handouts to assist in their presentations. Presentations topics will be related to business. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 115 F Professional Business Etiquette****3 Units**

54 hours lecture per term. This course covers the business protocol and etiquette skills needed to be successful in the business workplace. This course teaches students to present with confidence and authority. Proper business protocol skills will be reviewed including proper introductions and handshakes, the proper etiquette for business dining, dressing for success, business meeting protocol, and technical etiquette skills, including business correspondence. Students will learn how to prepare for and execute an interview, starting with how to prepare a strong resume. (Degree Credit) (CSU)

**BUS 131 F Principles of International Business****3 Units**

54 hours lecture per term. This course provides an overview of the global business environment by examining the similarities and differences in comparison with the United States of doing business in various contemporary foreign cultural settings. It focuses on the differences of the economic, political, financial, and legal systems. It also discusses the ways of managing these differences through understanding the principles of marketing, exporting, financing, production, and human resource management in the context of a multicultural business environment. This course is recommended for all business management/international business majors. This course fulfills the Multicultural Educational Requirement for Graduation. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 132 F Principles of Import and Export****3 Units**

54 hours lecture per term. This course provides a thorough and practical treatment of the importing and exporting activities involved in international trade. The course is designed to acquaint the student through a comprehensive approach to import/export as a continuous activity. It allows gaining firsthand how-to knowledge for those seeking to either get familiarized or work in the international trade industry, contemplating to start an import/export activity, or for managers wishing to expand their company's market opportunities. Special emphasis is placed on agencies involved, terms and conditions, documentation requirements and formalities, transportation, insurance, banking and finance, marketing, and sources of information. (CSU)

**BUS 151 F Business Mathematics****3 Units**

**Prerequisite(s):** MATH 020 F or any previous Algebra course with a grade of C or better or math skills clearance with a grade of C or Pass.

54 hours lecture per term. This course prepares students for mathematical concepts involving quantitative reasoning and analysis in management, finance, accounting, real estate, and other areas of business. This course content involves a thorough study of all aspects of business mathematics including basic computational skills, fractions, decimals, percentages, bank reconciliation, use of business formulas and equations, payroll, discounts, and markup/markdowns, simple and compound interest, present values analysis, annuities and sinking funds, credit, depreciation and inventory, payroll taxes, promissory notes, insurance, financial reports, and business statistics. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 162 F Business Economics****3 Units**

54 hours lecture per term. This course covers economic principles and problems of today's business world are emphasized. An elementary and practical course intended to acquaint the student with the present-day operation of the American free enterprise system. Business terminology, price competition, labor problems, business cycles, national income, public and international finance, and government control are emphasized. This course provides an independent, business-related study of economics for the student of business management courses. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 170 F Principles of E-Business****3 Units**

54 hours lecture per term. This course will provide a comprehensive introduction to the field of e-business and integration of the Internet into existing business, taking into consideration the four critical infrastructures: technology, capital, public policy and media. This course focuses on presenting a working definition and framework for the study and practice of electronic commerce, e-business and Internet integration strategies. (Degree Credit) (CSU)

**BUS 180 F Small Business Management****3 Units**

54 hours lecture per term. This course studies various small business enterprises including retail, wholesale, manufacturing, service, and home-based business. Factors in business success and advantages and disadvantages of business ownership are analyzed. This course covers the problems encountered in planning, starting and operating a small business, including financial sources, accounting information, marketing and other related information. (Degree Credit) (CSU)

**BUS 181 F The Entrepreneurial Mindset (formerly Business Plan Development)****3 Units**

54 hours lecture per term. This course is a study of social and business entrepreneurs throughout history and around the world. An exploration of the traits that enable entrepreneurs to thrive in vastly different culture and eras, and the important contributions made by these innovators. (Degree Credit) (CSU) AA GE

**BUS 182 F Mobile Applications for Business - APPs (formerly Doing Business Online) 3 Units****Advisory:** Familiarity with Adobe Dreamweaver and HTML

54 hours lecture per term. This course is designed to teach the fundamental use of mobile applications for business and provides a foundation for building mobile apps in popular platforms. Students learn about general mobility concerns, available platforms and devices, market share, possibilities for mobile business apps, as well as how to acquire, install, and use existing mobile apps. Mobile apps for marketing, productivity and e-commerce are covered. (Degree Credit) (CSU)

**BUS 183 F Entrepreneurship: Hornet Startup Lab 1 Unit**

Pass/No Pass or Letter Grade option. 54 hours lab per term. This is a hands-on course for students that have entrepreneurial ideas, but need the tools and knowledge necessary for startup development, prototyping, launch, and sustainability. Business leadership training, experience, knowledge and practical experience in entrepreneurship and business. Completion of a small business planning class is highly recommended before registering for this class. (Degree Credit) (CSU)

**BUS 185 F Creativity Matters! 3 Units**

54 hours lecture per term. This course will increase the degree to which students recognize and nurture their creative potential in business and life. The course focuses on four aspects of creativity: the creative person, the creative process, the creative product, and the creative environment. It further emphasizes the interactive nature of these elements and provides for individual application in personal and professional settings. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 186 F Funding Special Projects and New Ventures 1 Unit**

18 hours lecture per term. This course provides a comprehensive overview of the funding process for special projects including entrepreneurship, education, travel, product development, etc. with particular reference to researching, writing, and managing of a range of funding types. This course covers the range of possible funding solutions including grants, giving institutions, government, corporate, foundations, and social fundraising/crowd funding. Emphasis is on developing competitive proposals, accurate budgets, and appropriate systems to manage the project. (CSU)

**BUS 187 F Innovation and New Product Development 3 Units**

54 hours lecture per term. This course leads to in-depth understanding of the requirements, issues (including ethics and sustainability), and tools involved in the planning and development of new products and services. This course addresses determination of new product development strategies based on market needs. Students examine variables including number and diversity of products, product innovations, product design, prototyping, and testing for form, function, and the marketplace. (Degree Credit) (CSU)

**BUS 188 F Introduction to the Internet of Things Product Development 3 Units**

54 hours lecture per term. This course explores the Internet of Things (IoT) which is the fast-growing network of physical objects or "things" embedded with electronics, software, sensors, and connectivity to enable it to achieve greater value and service by exchanging data with the manufacturer, operator and/or other connected devices. Each thing is uniquely identifiable through its embedded computing system but is able to inter-operate within the existing Internet infrastructure. This course will prepare student-entrepreneurs to dream, develop, install, configure and maintain these devices for new product development. (Degree Credit) (CSU)

**BUS 201 F Financial Investments 3 Units**

54 hours lecture per term. This course provides a comprehensive study of stocks, bonds, and related securities that includes a detailed study of the nature of these securities and their markets. Emphasis is placed on personal investment objectives for growth, growth with incomes, and income with preservation of capital together with taxes that affect investment policy. (Degree Credit) (CSU) AA GE

**BUS 211 F Critical Reasoning and Writing for Business (formerly Writing for Business) 3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF, with a grade of C or better

54 hours lecture per term. This course refines communication skills and knowledge needed in organizations today. Emphasis will be placed on critical thinking and developing the ability to analyze, criticize and advocate ideas, to reason inductively and deductively and to reach well-supported factual or judgmental conclusions in writing. This course will include communication fundamentals; ethical, legal and multicultural issues; correspondence applications; employment communication; oral and non-verbal communication; report writing; management presentations; team/group building skills; research methods; critical thinking and running effective meetings and conferences. Computer-mediated applications will be presented throughout the course. (Degree Credit) (CSU) AA GE (C-ID: BUS 115)

**BUS 211HF Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business) 3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better

54 hours lecture per term. This is an intermediary course to communication skills and knowledge needed in organizations. This course will include communication fundamentals; ethical, legal and multicultural issues; correspondence applications; employment communication; oral and nonverbal communication; report writing; management presentations; team/group building skills; research methods; critical thinking and running effective meetings and conferences. Computer-mediated applications will be presented throughout the course. As an Honors course, this class will use enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. (Degree Credit) (CSU) AA GE (C-ID: BUS 115)

**BUS 224 F International Marketing 3 Units**

54 hours lecture per term. This course provides an analysis of worldwide marketing opportunities through a consideration of political, legal, economic, and cultural factors in the international context. Special emphasis will be placed on international market research, product development and positioning, pricing, distribution, and promotion. Recommended for students pursuing business management and international business degrees. (Degree Credit) (CSU)

**BUS 225 F International Management 3 Units**

54 hours lecture per term. This course provides practical knowledge with specific applications in international business management. Topics include import/export management, international financial management, foreign joint venture, foreign licensing and franchising, and counter trade. The course combines integrated text materials with carefully selected comprehensive case studies that are designed to demonstrate the practical experience of firms of all sizes as they come to grips with an increasingly competitive global environment. Recommended for students pursuing business management and international business degrees. (Degree Credit) (CSU)

**BUS 226 F International Finance****3 Units**

54 hours lecture per term. This course is designed to familiarize students with the basic tools and concepts of International Financial Management, including assessing the current economic environment, computing foreign exchange rates, analyzing foreign exchange risks, learning how to calculate time value of money of global assets, and considering current and prior issues impacting international finance. (Degree Credit) (CSU)

**BUS 228 F Study Abroad Experience****3 Units**

**Advisory:** A previous study abroad trip or experience living and traveling abroad.

54 hours lecture per term. This course will provide students with an opportunity to conduct a cross-cultural analysis between the US and their host country as a capstone to their previous study abroad experience. Topics will include understanding how cultural differences affect business, economy, and politics. Understanding how the experience creates global citizens and promotes peace and trade between cultures. Students will create tactics to add the experience to job prospects and career building. (Degree Credit) (CSU)

**BUS 240 F Legal Environment of Business****3 Units**

54 hours lecture per term. This course is an introduction to the legal environment in which a business firm operates. Topics include an introduction to the American legal system, contracts, torts, product liability, forms of business organization, trade regulation, labor law, environmental law, and international business law. (Degree Credit) (CSU) (UC Credit Limitation: BUS 240 F, BUS 240HF, BUS 245 F and BUS 246 F combined; maximum credit, one course) AA GE (C-ID: BUS 120)

**BUS 240HF Honors Legal Environment of Business****3 Units**

54 hours lecture per term. This Honors-enhanced course is an introduction to the legal environment in which a business firm operates. Topics include an introduction to the American legal system, contracts, torts, product liability, forms of business organization, trade regulation, labor law, environmental law, and international business law. As an Honors course, students will conduct independent legal research and prepare class presentations of court cases and legal arguments. This class will use the Socratic method of instruction. (Degree Credit) (CSU) (UC Credit Limitation: BUS 240 F, BUS 240HF, BUS 241AF and BUS 241BF combined; maximum credit, one course) AA GE (C-ID: BUS 120)

**BUS 242 F International Business Law****3 Units**

54 hours lecture per term. This course provides an introduction to the legal and cultural issues raised in formulating an international business strategy and engaging in international business transactions. Topics include international contracting, export-import, licensing and technology transfer, and sales of services. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) AA GE

**BUS 245 F Business Law I (formerly BUS 241AF)****3 Units**

54 hours lecture per term. This course is an introduction to business law principles and cases, including a review of the classes and sources of law, agencies for enforcement, court procedure, and civil and criminal liability. The major subject area studied is the law of contracts. A special study is made of sales of goods based upon the Uniform Commercial Code with emphasis placed on consumer protection. (Degree Credit) (CSU) (UC Credit Limitation) AA GE

**BUS 246 F Business Law II (formerly BUS 241BF)****3 Units**

54 hours lecture per term. This course is a continuation of BUS 245 F with emphasis on business organization. Areas of study include commercial paper, agency employment, partnerships, corporations, antitrust, securities, and bankruptcy law. (Degree Credit) (CSU) (UC Credit Limitation)

**BUS 251 F Business Finance****3 Units**

54 hours lecture per term. This is an introductory course to the field of finance, the focus is on the practical significance of the fundamental concepts of finance. The class will include the analysis of financial markets, financial statements, planning and control, working capital management, time value of money, valuation models, capital budgeting, dividend policy and mergers and acquisitions. (Degree Credit) (CSU)

**BUS 255 F Introduction to Business and Data Analytics****3 Units**

54 hours lecture per term. This course is an introductory business course designed to give an understanding of the complete analytics cycle. From determining requirements to extracting and disseminating information, this course will cover the process, technologies, applications, tools, and skills required to analyze data so that informed and timely decisions can be made. Students will learn the methodologies, techniques, and tools most commonly used in data analytics. Other topics include methods and tools for visualization, inference, forecasting, optimization, simulation, and data mining. Tools will include Excel, Qualtrics Survey Software and Tableau. (Degree Credit) (CSU)

**BUS 262 F Principles of Management****3 Units**

54 hours lecture per term. This course covers the principles, methods, and procedures essential to the successful management of human and financial resources. Planning, organizing, leading, controlling and the application of managerial skills are discussed. (Degree Credit) (CSU)

**BUS 266 F Human Relations in Organizations (formerly Human Relations in Business)****3 Units**

54 hours lecture per term. 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 behavioral science theories and principles. Topics include values, perception, motivation, conflict management, teamwork, and leadership. (Degree Credit) (CSU) AA GE

**BUS 267 F Principles of Supervision****3 Units**

54 hours lecture per term. This course is designed for first-line, new, or future managers covering the skills required to effectively supervise and manage employees in organizations. This class emphasizes the supervisors' need for a working understanding of the functions of management and the practical supervisory skills relating to employees, work teams, workplace diversity, ethics, and special concerns. Topics include the role and function of supervisors, recruitment and evaluation of workers, task delegation, motivation, employee discipline, training and professional development, conflict management, labor relations and legislation, communication, employee safety, and time management. (Degree Credit) (CSU)

**BUS 268 F Human Resource Management****3 Units**

54 hours lecture per term. This course is an introduction to the formulation and implementation of human resource policy concerned with the major aspects of how an organization deals with its people: how it acquires them, utilizes them, rewards them, and separates them. Explores how the personnel functions integrate with the overall strategy of the firm in determining the success of the business. (Degree Credit) (CSU)



**BUS 271 F Leadership and Business Ethics****3 Units**

54 hours lecture per term. This course focuses on leadership and ethics in business today. It addresses leadership models perspectives and practices, and the complexities and principles of ethical business issues. Leadership topics include leading and motivating individuals and work teams, workplace diversity, followership, self-assessment and skills development. Business ethics topics include ethical leadership and decision making, organizational value systems and identifying and developing tools needed to effectively deal with ethical dilemmas. (Degree Credit) (CSU)

**BUS 281 F The Business of Cannabis****3 Units**

54 hours lecture per term. This course examines the fast-growing industry of cannabis and explores the planning, marketing, and running of a legal cannabis business in California. It is designed for anyone looking to learn about the cannabis industry and what to look for to start a business within the industry. Emphasis is placed on the analysis and practical application of dispensary business operations, legal issues and compliance, accounting, and security. Students will prepare a business and marketing plan for startup cannabis businesses. (Degree Credit) (CSU)

**BUS 290 F Managerial Communications****3 Units**

54 hours lecture per term. This course covers a variety of communication challenges that typically arise in management and emphasizes the development of communication skills to successfully manage individuals and groups. Topics include leadership and management skills, developing work relationships, ethics, managing meetings, making presentations, interviewing, performance appraisals, negotiation, conflict resolution, using electronic communications technology, and group communication strategies. (Degree Credit) (CSU)

**BUS 295 F Business Internship (formerly BUS 061 F)****2-4 Units**

Pass/No Pass/Letter Grade option. 18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in Business. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards one unit per 75 hours of paid internship or one unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

**BUS 296 F Business Internship II****2-4 Units**

**Prerequisite(s):** BUS 295 F with a grade of C or better

18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (Degree Credit) (CSU)

**BUS 297 F Business Internship III****2-4 Units**

**Prerequisite(s):** BUS 296 F with a grade of C or better

18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

**BUS 298 F Advanced Topics in Business****3 Units**

54 hours lecture per term. This course addresses current and emerging topics in management/business. Students research several management/business topics, integrate this research with material from other management and business courses, and recommend solutions, courses of action, or strategies for dealing with these issues. The topics addressed in this course will change over time as important issues in business, management, and/or society evolve. (Degree Credit) (CSU)

## Chemistry (CHEM)

**CHEM 100 F Chemistry for Daily Life****4 Units**

54 hours lecture and 54 hours lab per term. This course focuses on the practical significance of the fundamental concepts of chemistry in the context of societal, political and economic issues that impact our world. Units may include, but are not limited to the following: the chemistry of the atmosphere and water, fission and fusion, energy, chemistry, and society, pharmaceutical, new materials, the chemistry of nutrition and agriculture. Student participation is stressed individually and in groups, through written and oral assignments. The laboratory provides hands-on experience with chemical phenomena. This course is designed for the non-science major seeking a lab science. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC

**CHEM 101 F Chemistry for Allied Health Science****5 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance.

72 hours lecture, 54 hours lab and 18 hours problem solving per term. This course provides an introduction to the principles of inorganic and organic chemistry. This course includes a lab and will meet physical science transfer requirements. This is a course required of numerous allied health science majors. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC (C-ID: CHEM 101, CHEM 140)

**CHEM 103 F Chemistry in a Changing World****3 Units**

54 hours lecture per term. This course is intended for non-science students seeking general education credit in a physical science course without a laboratory. Course emphasizes basic principles of chemistry and their relationship to the modern world. This course will foster an interest in science by preparing student to make effective decisions, and by developing thinking skills that can be applied to challenges in a changing world. Topics include air and water pollution, energy resources, basic biochemistry, and current scientific developments involving chemistry. (Degree Credit) (CSU) (UC Credit Limitation: no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC

**CHEM 107 F Preparation for General Chemistry****5 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance

72 hours lecture, 54 hours lab and 18 hours problem solving per term. This course is strongly recommended for students who have not had high school chemistry or who earned a grade of C or less in the high school course. The fundamental principles of chemistry are stressed, with emphasis on the chemistry of inorganic compounds. Includes atomic structure, chemical bonding, descriptive chemistry, stoichiometry, gas laws, solutions, equilibrium and redox. This course is intended to prepare students specifically for CHEM 111AF and CHEM 111BF. Lab work supports topics of CHEM 107 F. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC

**CHEM 111AF General Chemistry I** 5 Units

**Prerequisite(s):** CHEM 107 F with a grade of C or better or a passing score on the Chemistry Proficiency Test and MATH 040 F with a grade of C or better or math skills clearance.

54 hours lecture, 54 hours lab, 36 hours problem solving and 18 hours discussion per term. This course covers the topics of chemical reactions and stoichiometry, thermochemistry and calorimetry, atomic structure and chemical periodicity, chemical bonding, molecular structure, gases, physical properties of solids, liquids and solutions, and organic chemistry. The laboratory sequence will support the above topics including both qualitative and quantitative experiments, analysis of data and error propagation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: CHEM 110, CHEM 120S)

**CHEM 111BF General Chemistry II** 5 Units

**Prerequisite(s):** CHEM 111AF with a grade of C or better

54 hours lecture, 54 hours lab, 36 hours problem solving and 18 hours discussion per term. This course covers the topics of kinetics, equilibria, acid and bases, thermodynamics, electrochemistry, transition metals, coordination compounds and nuclear chemistry. The laboratory sequence will support the above topics including both qualitative and quantitative experiments, analysis of data and error propagation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: CHEM 120S)

**CHEM 201 F Biochemistry for Allied Health Science** 5 Units

**Prerequisite(s):** CHEM 101 F with a grade of C or better

72 hours lecture, 36 hours lab, 18 hours problem solving and 18 hours discussion per term. This course is the second semester of a two semester sequence (CHEM 101 F and CHEM 201 F). This course is a study of organic chemistry: structures, nomenclature, reactions and functions of organic and biochemical compounds; cell structure, metabolism, bioenergetics, biochemical genetics, and mechanisms of vitamin and enzyme action. This course is designed for the health professions. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: CHEM 102)

**CHEM 211AF Organic Chemistry I** 5 Units

**Prerequisite(s):** CHEM 111BF with a grade of C or better

54 hours lecture, 72 hours lab and 36 hours discussion per term. This course is the first part of a full year organic chemistry course designated primarily for chemistry majors but strongly recommended for pre-medical, pre-dental, pre-veterinary, pre-chiropractic, and biology majors. Emphasis is upon fundamental concept and application to molecular structure and chemical reactivity. Considerable stress is placed upon reaction mechanism, energetics, syntheses, stereochemistry, and molecular spectroscopy. Laboratory work includes techniques such as distillation, extraction, chromatography, and synthesis and qualitative analysis. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: CHEM 150, CHEM 160s)

**CHEM 211BF Organic Chemistry II** 5 Units

**Prerequisite(s):** CHEM 211AF with a grade of C or better,

54 hours lecture, 72 hours lab and 36 hours discussion per term. This course is the second part of a full year organic chemistry course designed primarily for chemistry majors but strongly recommended for pre-medical, pre-dental, pre-veterinary, pre-chiropractic, and biology majors. Aliphatic and aromatic compounds are integrated with the functional group approach maintained. Considerable emphasis is placed upon reaction mechanism, energetics, syntheses, stereochemistry, and spectroscopy. Lab work is on synthesis and qualitative analysis employing techniques learned in CHEM 211AF. (Degree Credit) (CSU) (UC) (C-ID: CHEM 160S)

# Child Development and Educational Studies (CDES)

**Division: Social Sciences**

**CDES 115 F Introduction to Early Childhood Education Curriculum** 3 Units

54 hours lecture per term. This course presents an overview of knowledge and skills related to developing and providing appropriate curriculum and environments for young children from birth to age six. Students will examine a teacher's role in supporting development and fostering the joy of learning for all young children using observation and assessment strategies emphasizing the essential role of play. An overview of content areas will include, but not be limited to Art, Science and Math, language and literacy, social and emotional development and creativity. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 130)

**CDES 116 F Art Education in Early Childhood (formerly CDES 123AF)**

2 Units

36 hours lecture per term. This course examines the teacher's role in children's artistic growth. Emphasis is on the child as the artist, learner and creator of ideas. Students explore, analyze, and experience artistic studio processes that support children's use of art as a tool for communication, thinking, understanding and learning. Students will gain observational skills at the CDES Laboratory School classrooms. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**CDES 117 F Literacy and Language in Early Childhood (formerly CDES 123BF)**

2 Units

36 hours lecture per term. This course examines the teacher's role in children's literacy development. Language development topics include: receptive and expressive, writing and reading, storytelling experiences. Students explore, analyze, practice and present literacy experiences to children that support their use of language and literacy techniques as a tool for child communication, understanding and comprehension. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. (Degree Credit) (CSU)

**CDES 118 F Science and Math Education in Early Childhood (formerly CDES 123CF)**

2 Units

36 hours lecture per term. This course gives students insight, knowledge and techniques for designing scientific early childhood classroom environments that promote a constructivist approach. Emphasis is on the child as researcher, explorer and investigator. Students explore processes that promote in-depth science investigation and early math understanding including nature and gardening. Students gain observational skills at the CDES Laboratory School classrooms. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**CDES 119 F Music Education in Early Childhood (formerly CDES 123DF)**

2 Units

36 hours lecture per term. This course prepares students to create children's musical environments as they explore the elements of music. Both vocal and instrumental music are explored. The role of the teacher as community builder and bridge between music, relationships with the child and family is emphasized. (Degree Credit)(CSU)

**CDES 120 F Child Development****3 Units**

54 hours lecture per term. This course is designed to study the entire scope of developmental theories addressing physical, intellectual, moral, social and emotional development. Periods of development from prenatal through adolescence are presented in a chronological sequence. Research methodologies are discussed as students are expected to think critically about theory and research. Interaction of heredity, environment and maturation is explored. Students will observe children, evaluate individual differences and analyze characteristics of development using inclusive viewpoints. (Degree Credit) (CAP Aligned) (CSU) (UC Credit Limitation CDES 120 F and CDES 200 F combined; maximum credit, one course) AA GE, CSU GE (C-ID: CDEV 100)

**CDES 121 F Introduction to Early Childhood Education - The Assistant****Teacher****3 Units**

**Advisory:** Current TB test results required; student showing completion of NOCROP program may apply to waive this course; enrollment in and completion of six units at Fullerton College in Child Development.

54 hours lecture per term. This course explores the role of the teacher assistant; developing conversations with children and key factors in learning are emphasized. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional) as well as a negative TB test to participate in this course. (Degree Credit) (CSU)

**CDES 122 F Principles of Early Childhood Education****3 Units**

54 hours lecture per term. This course emphasizes the development of the teacher and the construction of quality programs. Focus areas included are developmentally appropriate practice, equitable, inclusive environments, cross-cultural/non-sexist education, ethics, health, safety, curriculum, and working with parents and colleagues. The role of the adult as teacher and advocate is studied. Students gain observational skills at the Child Development and Educational Studies Department Laboratory Instructional classrooms. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 120)

**CDES 125 F Observation and Assessment for Early Learning and Development****3 Units**

54 hours lecture per term. This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored, emphasizing the use of findings to inform and plan learning environments and experiences. Students will observe young children in licensed facilities (including the CDES Lab School) as part of the assignments for the course. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 200)

**CDES 140 F Infant and Toddler Development and Observation****3 Units**

54 hours lecture per term. This course studies the child from birth to age three including prenatal development with an emphasis on physical, intellectual, social and emotional growth and development. Family interrelationships, establishment of basic trust and autonomy, and cultural variations on nurturing are included. Interwoven into this course are appropriate observation and assessment techniques. (Degree Credit) (CSU)

**CDES 141 F Principles of Infant and Toddler Care and Education****3 Units**

54 hours lecture per term. This course provides the student with an overview of the organization and operation of infant-toddler programs including: goals, philosophy, infant and family needs, activities and routines, physical space and equipment. An emphasis is on developmentally appropriate, culturally sensitive care for infants in group settings. (Degree Credit) (CSU)

**CDES 151 F School Age Child - Programs, Curriculum and Guidance****3 Units**

54 hours lecture per term. This course is for those working in school-age extended-day programs. Emphasis is on philosophy, guidance and discipline, legal issues, program/curriculum development and developmentally appropriate activities reflecting issues of diversity. Students develop criteria for evaluating quality programs. (Degree Credit) (CSU)

**CDES 199 F Child Development Independent Study****1 Unit**

54 hours independent study per term. This course is for students who wish to increase their knowledge of Child Development and Educational Studies through individual study. Students successfully completing this course will be awarded elective credit in the Child Development and Educational Studies area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required.)

**CDES 200 F Adolescent Development****3 Units**

54 hours lecture per term. This course provides an in-depth examination of the developmental period of adolescence. Emphasis is on physical, social, intellectual, moral and identity development in a framework reflecting the growing diversity of our population. While theoretical understanding is emphasized, issues such as teen pregnancy, family relationships, and education are addressed. (Degree Credit) (CSU) (UC Credit Limitation: CDES 120 F and CDES 200 F combined; maximum credit, one course)

**CDES 201 F Child in the Home and Community****3 Units**

54 hours lecture per term. This course provides an environmental study of the interaction of the family, school and community in the life of the developing child. Students explore the diversity of families and the support of these families throughout various social structures. Emphasis is on early childhood education, schools, community agencies and the responsibility of the professional as advocate. (Degree Credit) (CAP Aligned) (CSU) AA GE, CSU GE (C-ID: CDEV 110)

**CDES 204 F Introduction to Special Education****3 Units**

54 hours lecture per term. This course provides an overview of special education and the relationship to children with special needs. It includes the theoretical and educational foundations of special education, a historical background to the field of special education, legal issues, and techniques for inclusion of individuals with special needs in all settings. Various implications of full inclusion are discussed. (Degree Credit) (CSU)

**CDES 205 F Creating Environments for Young Children****3 Units**

54 hours lecture per term. This course is designed for adults interested in planning inclusive environments for children. It is valuable for teachers, directors, site supervisors, administrators, and interior designers. Students develop ways of examining environmental settings for children and evaluate the use of physical space and the selection of activity settings in terms of program goals. The study of contemporary issues in environmental planning to enrich children's experience is emphasized. Students observe children and settings and design both indoor and outdoor environments for group settings. (Degree Credit) (CSU)

**CDES 206 F Sensory Integration and Motor Planning for Young Children 3 Units**

54 hours lecture per term. This course provides early childhood educators and parents with a better understanding of the sensory and motor development of young children. Guidelines for perceptual-motor activities are explored. Techniques for early identification of learning, sensory processing, and emotional difficulties are investigated. Strategies for establishing an environment to enhance sensory and physical development are addressed. (Degree Credit) (CSU)

**CDES 207 F Principles and Techniques of Early Childhood Special Education with Field Experience 3 Units**

54 hours lecture per term. This course is designed for those who are or will be working with groups of young children. Identifying the teacher's role in early diagnosis, using IEP's (Individual Education Plans), working with specialists, and working with families are discussed. Teaching techniques, appropriate teaching goals, and curriculum adaptations are emphasized in relation to all the federally recognized categories of special education. Specific behavior management techniques and the importance of environmental adaptations for effective programs are included. Full inclusion policies and natural environments are discussed. (Degree Credit) (CSU)

**CDES 208 F Working with Families of Children with Special Needs 3 Units**

54 hours lecture per term. This course is designed for teachers, administrators, parents, and others interested in supporting families of children with special needs in early childhood settings. Developing techniques and strategies to provide this support is emphasized, as well as building a knowledge base of resources available to parents and early childhood programs. The emphasis is on the collaboration between the families and a multidisciplinary team. (Degree Credit) (CSU)

**CDES 209 F The Role of the Para-Professional in Diverse Settings 3 Units**

54 hours lecture per term. This course is an overview of the roles and responsibilities of paraprofessional including legal, instruction, evaluation and behavioral components. It is designed to train persons to work as classroom teaching assistants in public schools. This course meets the current legislative requirements for paraprofessional. (Degree Credit) (CSU)

**CDES 210 F Anti-Bias Perspective and Diversity Seminar 3 Units**

**Advisory:** ENGL 100 F or ENGL 100HF.  
This seminar places an emphasis on addressing issues of bias that individuals, children and families experience on a daily basis. This course requires students to examine their own world views and look at issues from a historical and cultural context. Students are challenged to take the journey on becoming an anti-bias educator in preparation for creating a culturally-relevant teaching environment where adults and/or children actively foster cognitive, emotional and behavioral skills needed to respectfully and effectively learn about differences and similarities. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 230)

**CDES 211 F Classroom Practices for Diverse Learners 3 Units**

54 hours lecture per term. This course is designed for those who are or will be assisting in the elementary through secondary educational setting. Students will be prepared to facilitate classroom and community practices for diverse learners (individuals who have disabilities, second language learners, gifted, etc.). Topics will include literacy, language, and behavior support. Introductory knowledge in the assessment, design and implementation of life-span curriculum and methodology will be covered. (Degree Credit) (CSU)

**CDES 215 F Health, Safety, Food, and Nutrition for Children 3 Units**

54 hours lecture per term. This course focuses on health, safety and the use of food as an instructional medium in early childhood settings. Emphasis is placed on safety and sanitation issues for the prevention of injury and infectious diseases, the care of mildly-ill children, planning and organizing food-related activities, the application of basic nutrition principles to menu planning, the resolution of common food-related problems such as obesity and food allergies and techniques and resources for providing culturally-appropriate foods and nutrition education. This course meets, in-part, the California Department of Social Services health/safety requirements for family child care and center-based providers. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 220)

**CDES 225 F Early Childhood Student Teaching Practicum 3 Units**

**Prerequisite(s):** CDES 115 F and CDES 116 F and CDES 118 F and CDES 120 F, with a grade of C or better.  
**Corequisite:** CDES 238 F with a grade of C or better. 18 hours lecture and 108 hours lab per term at the CDES Lab School instructional classrooms. This course includes study, exploration and practice in the many varied roles of the early childhood teacher. Topics include constructivism, emergent curriculum, developmental education, play, nature-based curriculum, environment, the Reggio-inspired principles of learning including the image of the child, observation, reflective teaching processes, child theory building, assessment of learning and documentation of children's learning is studied. Cultural and linguistic practices are included. Students will be under the direction/supervision of faculty and/or qualified Lab Tech/mentor teacher. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 210)

**CDES 230 F Early Childhood Education Administration - Business Models and Practices 3 Units**

**Prerequisite(s):** CDES 115 F and CDES 120 F and CDES 122 F and CDES 201 F with a grade of C or better, or equivalent courses at a CAP-aligned college (Curriculum Alignment Project, State of California).  
54 hours lecture per term. This course emphasizes facility and financial management, marketing, enrollment, managing health and safety, food service, and legal considerations for early childhood education programs. This course is required for the Early Childhood Education Administration Certificate and meets the State Department of Social Services licensing (Title 22) regulations for administrators. This course, together with CDES 231 F, fulfills the requirement for both Site Supervisor and Program Director permits for the State Department of Education (Title 5). (Degree Credit) (CSU)

**CDES 231 F Early Childhood Education Administration: Management Models and Personnel 3 Units**

**Prerequisite(s):** CDES 115 F and CDES 120 F and CDES 122 F and CDES 201 F, with a grade of C or better.  
54 hours lecture per term. This course focuses on child development and educational theory and philosophy; effective administrative; supervisory and leadership skills; quality early childhood education programming; planning, organizing, staffing and evaluating child care centers; effective communication; and advocacy. This course is required for the Early Childhood Education Administration Certificate, meets the State Department of Social Services (Title 22) licensing regulations for administrators, and together with CDES 230 F, fulfills the requirement for both Site Supervisor and Program Director, State Department of Education (Title 5). (Degree Credit) (CSU)

**CDES 238 F Reggio and Constructivism in Early Childhood 3 Units**

54 hours lecture per term. This course is intended for early educators interested in deepening their knowledge of teaching and learning. A seminar founded in the principles of the Reggio Emilia philosophy and the Constructivist approach to early learning. Topics include reflective teaching, children's theory building, emergent curriculum, natural learning environments, observation and documentation. This course includes field trips and instruction at the CDES Laboratory School classrooms and studios during class time. Master Teacher level Child Development Permit Matrix specialization course. (Degree Credit) (CSU)

**CDES 240 F Mentoring and Leadership in Early Childhood Education 3 Units**

**Advisory:** Two years of early childhood teaching experience

54 hours lecture per term. This course is intended for early educators interested in deepening their knowledge of mentoring, supervising and leadership. Strategies for positive growth and change in the early childhood profession are explored. Course focuses on the promotion of quality professional teaching environments, including the study of the following: communication skill development, effective working relationships and innovations in the field. Course meets requirements for adult supervision at the Master Teacher level on the Child Development Permit Matrix and application to the California Mentor Teacher Project. (Degree Credit) (CAP Aligned) (CSU)

**CDES 242 F Introduction to Liberal Studies 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better.

54 hours lecture per term. This course is a survey of the historical foundations and interdisciplinary nature of liberal studies, including an introduction to the values, modes of inquiry, and means of expression in the natural sciences, social sciences, and arts and humanities. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**CDES 261 F Introduction to Elementary Classroom Teaching 3 Units**

54 hours lecture per term. This course provides students interested in elementary teaching an introduction to teaching and learning; an overview of the scope and sequence of curriculum planning; understanding of content standards, California Standards of the Teaching profession; experience in the development, presentation, and evaluation of learning activities. This course is part of an articulation agreement with CSUF for preparation for the teaching credential program. To qualify for this articulation, students must earn a grade of B or better for this course. (Degree Credit) (CSU)

**CDES 299 F Child Development Independent Study 1 Unit**

54 hours independent study per term. This course is for students who wish to increase their knowledge of Child Development and Educational Studies through individual study. Students successfully completing the course will be awarded elective credit in the Child Development and Educational Studies area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content); UC review required)

## Chinese (CHIN)

**CHIN 101 F Elementary Chinese - Mandarin I 5 Units**

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Chinese-speaking countries. This course is conducted primarily in Chinese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**CHIN 102 F Elementary Chinese - Mandarin II 5 Units**

**Prerequisite(s):** CHIN 101 F with a grade of C or better or Pass or one year of high school Chinese with a grade of C or better

90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to achieve these skills. Included is an introduction to customs, culture, and civilization of Chinese-speaking countries. This course is conducted primarily in Chinese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**CHIN 203 F Intermediate Chinese - Mandarin III 4 Units**

**Prerequisite(s):** CHIN 102 F with a grade of C or better or Pass or two years of high school Chinese with a grade of C or better

72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing Chinese based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**CHIN 204 F Intermediate Chinese - Mandarin IV 4 Units**

**Prerequisite(s):** CHIN 203 F with a grade of C or better or Pass or three years of high school Chinese with a grade of C or better

Letter Grade or Pass/No Pass option. 72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Chinese based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Chinese culture by introducing literary readings. This course is conducted entirely in Chinese. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

## Cinema, Radio and Television (CRTV)

**CRTV 118 F Introduction to Radio, TV and Film 3 Units**

54 hours lecture per term. This course is designed to assist the beginning student in understanding radio, television, cable, film, and electronic mass media. For those who plan to pursue a career in broadcasting or film, this course will provide guidance for career decisions and background for more specialized courses. For those with a general interest in broadcasting and film, this course will provide a broad understanding of the electronic mass media industries. (Degree Credit) (CSU) AA GE (C-ID: FTVE 100)

**CRTV 120 F Media Aesthetics 3 Units**

54 hours lecture per term. This course provides a background in understanding aesthetics used in television, motion pictures, video games, digital media and explores the development and impact of mediated messages. The interplay and structuring of elements of sight, sound, and motion as message components, and their capacity to generate impressions, stimulate feelings, shape attitudes, and convey information are examined. (Degree Credit) (CSU) AA GE, CSU GE (C-ID: FTVE 105)

**CRTV 121 F American Cinema to the 1960s 3 Units**

54 hours lecture per term. This course examines the American motion picture industry as a unique economic, industrial, aesthetic, and cultural institution. Development and changes to the 1960's are examined related to technology; industrial and economic models; aesthetic styles and genres; production, marketing, and distribution processes; and audiences. (CSU) (UC) (Degree Credit) AA GE, CSU GE

**CRTV 122 F Audio Production Techniques****3 Units**

36 hours lecture and 72 hours lab per term. This course provides instruction in the operation of radio and television audio equipment, broadcast microphones, and computer software associated with media recording and internet radio. Projects will include production of radio commercials, television commercial soundtracks, digital audio editing, and special radio and television broadcast procedures with an emphasis on smooth operation of the audio control board and other audio equipment. (Degree Credit) (CSU) (C-ID: FTVE 120)

**CRTV 124 F Broadcast Advertising Sales****1 Unit**

18 hours lecture per term. This course covers the analysis of the sales function in commercial radio and television stations, and cable television franchises. The students examine the methodology and practical application of electronic media advertising, sales, and research. Audience demographics, market surveys, rate structure, and client relationships are included. Students will learn to write standard length commercials that focus on the targeted consumer and produce results for the advertiser. Discussion of media competitive advantages and disadvantages, as well as vocabulary and techniques of broadcast sales are also examined. (CSU) (Degree Credit)

**CRTV 126AF World Cinema to 1945****3 Units**

54 hours lecture per term. This is the first course in a two-course sequence that will provide a background in cinema history with a global perspective, following the growth of cinema from primarily a U.S. and European form of entertainment and communication to an international medium with significant production centers, cultural traditions, and production styles found in a variety of locations around the world. This course will focus on world cinema from its early development through the end of World War II. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**CRTV 126BF World Cinema 1946 to Present****3 Units**

54 hours lecture per term. This is the second course in a two-course sequence that will provide a background in cinema history with a global perspective, following the growth of cinema from primarily a U.S. and European form of entertainment and communication to an international medium with significant production centers, cultural traditions, and production styles found in a variety of locations around the world. This course will focus on world cinema after World War II to the present. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**CRTV 127 F Screenwriting****3 Units**

54 hours lecture per term. This course covers the concepts and practices in the various types of dramatic writing for television and motion picture production. Students will learn about characterization, conflict, structure, and commercial prospects. (CSU) (Degree Credit)

**CRTV 128 F Writing for Radio, TV and Film****3 Units**

54 hours lecture per term. This course covers the concepts, practices and forms for commercials, interviews, corporate and dramatic presentations for radio, television, film and the Internet. This is a course in all forms of media writing. (Degree Credit) (CSU) (C-ID: FTVE 110)

**CRTV 129 F Broadcast News****3 Units**

36 hours lecture and 72 hours lab per term. This course provides instruction and practice in gathering and writing news for radio and television. The emphasis is on writing copy and familiarization with professional practices in radio and television news operations, including the use of local news sources, international wire services and other news material. Course activities include planning, writing, and delivering news for radio and television. (CSU) (Degree Credit)

**CRTV 130 F Broadcast Audio Production****3 Units**

**Prerequisite(s):** CRTV 122 F completed with a grade of C or better

36 hours lecture and 72 hours lab per term. This course is designed to increase digital audio production skills for radio and television. Projects are designed to give students the opportunity to use the audio production room for a variety of production purposes for radio, television, film, internet and media production. (CSU) (Degree Credit)

**CRTV 131 F Contemporary American Cinema (formerly Contemporary Cinema)****3 Units**

54 hours lecture per term. This course focuses on the American motion picture industry beginning with the film school generation and the production processes, economic factors, and social influences that have shaped the industry and been shaped by the industry. This will include changes in practices relating to production aesthetics and techniques, marketing, distribution, and technology. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**CRTV 133 F Traffic Reporting****3 Units**

36 hours lecture and 54 hours lab per term. This course provides instruction and practice in gathering and reporting traffic for radio and television. The emphasis is on gathering information and writing and announcing traffic updates and familiarization with professional practices in radio and television traffic operations, including the use of local maps, CHP sources, Cal Trans cameras, and other online material. Course activities include compiling, composing, and delivering traffic reports for radio and television. (CSU) (Degree Credit)

**CRTV 135 F Broadcast TV and Radio Announcing****3 Units**

36 hours lecture and 54 hours lab per term. This is a course in announcing technique focusing on the announcing and voiceover skills most needed in contemporary radio and television. This course concentrates on announcer voice technique on and off camera, talk radio hosting skills, commercial interpretation, news announcing, podcasting and ad-libbing. (CSU) (Degree Credit)

**CRTV 139 F Intermediate Broadcast News****3 Units**

**Prerequisite(s):** CRTV 129 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course is designed to increase the skill level of broadcast news students who have taken one semester of CRTV 129 F, with added television reports, interviews, produced features, traffic reports and additional newscasts. (CSU) (Degree Credit)

**CRTV 145 F Radio and TV Sports Broadcasting****3 Units**

36 hours lecture and 72 hours lab per term. In this course, class members will be involved in the broadcast of local sports on radio station KBPK, 90.1 FM and the Fullerton College Cable Television Network. The sports to be broadcast include football, basketball, baseball and soccer. Students will also perform as sportscasters on news programs for KBPK. Students will interview local athletes, write, and produce feature material for broadcast. (CSU) (Degree Credit)

**CRTV 146 F Intermediate Sports Broadcasting****3 Units**

**Prerequisite(s):** CRTV 145 F with a grade of C or better

36 hours lecture and 72 hours lab per term. In this course, students will take the lead on writing and preparing broadcasts and building presentation/performance skills in the broadcast of local sports on radio station KBPK, 90.1 FM, the Fullerton College Cable Television Network, and Sportsnet web site. The sports to be broadcast include football, baseball, basketball, soccer, NASCAR and hockey. Students will also perform as sportscasters on news programs on KBPK. Students will interview local athletes, write and produce feature material for broadcast. The contributions of minorities and women in sports will be highlighted. (CSU) (Degree Credit)

- CRTV 147 F Advanced Sports Broadcasting** **3 Units**  
**Prerequisite(s):** CRTV 146 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. In this course, students will develop copy, produce, edit and analyze the effectiveness of broadcasts of local sports on radio station KBPK, 90.1 FM, the Fullerton College Cable Television Network, and the Internet. The sports to be broadcast include football, baseball, basketball, soccer, softball, hockey golf, tennis and volleyball. Students will also perform as sportscasters on Fullerton College Cable TV. Students will interview local athletes, and will also write and produce feature material for broadcast. (CSU) (Degree Credit)
- CRTV 149 F Advanced Broadcast News** **3 Units**  
**Prerequisite(s):** CRTV 129 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is designed to increase the skill level of broadcast news students. This course has added field television reports, community interviews, police and fire department telephone interviews, produced features, traffic reports written from source material, and additional newscasts. (CSU) (Degree Credit)
- CRTV 150 F Television Studio Production** **3 Units**  
 36 hours lecture and 54 hours lab per term. This course is an introduction to multiple-camera studio production, theory and practice of producing programs live. Student crew positions, including writer, producer, director, assistant director, lighting director, floor manager, camera operator, technical director, audio engineer, recording engineer and graphics designer. (Degree Credit) (CSU) (C-ID: FTVE 135)
- CRTV 157 F Digital Production and Non-Linear Editing for Video and Film** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course introduces single-camera video and filmmaking production techniques; including operation of digital video cameras and recorders and sound, lighting, and non-linear editing equipment. Students will use professional procedures from pre-production through post-production to develop, produce, and execute to completion various non-fiction and fiction program formats applicable to television and motion pictures. (Degree Credit) (CSU) (C-ID: FTVE 130)
- CRTV 160 F Introduction to 16mm Film Production and Digital Cinematography (formerly Introduction to Filmmaking)** **3 Units**  
**Prerequisite(s):** CRTV 157 F or DART 180 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course is an introduction to the fundamental techniques and aesthetics of film production including digital cinematography. Lecture/lab will emphasize camera operation, editing, lighting, cinematography and directing. Study and analysis of classic films as well as student's own work will be viewed. (Degree Credit) (CSU) (C-ID: FTVE 150)
- CRTV 164 F Advanced Digital Production and Non-Linear Editing for Video** **3 Units**  
**Prerequisite(s):** CRTV 157 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is designed to provide students with training and experience related to the design and execution of professional quality single-camera productions that would comprise a demo tape appropriate to pursue employment in the television/film industry. The focus will be on achieving levels of design and execution that are effective in meeting project/client and industry needs. Elements include multi-camera editing, green screen, key framing and color correction. (CSU) (Degree Credit)
- CRTV 175 F Documentary Filmmaking** **3 Units**  
**Advisory:** CRTV 157 F or knowledge of camcorder usage and Apple computers.  
 54 hours lecture per term. This course gives an introduction to modern digital documentary filmmaking techniques. Practical narrative and technical approaches to documentary productions are examined and demonstrated. Students will participate in production of a documentary project(s). (Degree Credit) (CSU)
- CRTV 196 F Communications Seminars** **0.5-3 Units**  
 0-54 hours lecture and 0-162 hours lab per term. This course is designed to expose students to up-to-date equipment, methods, techniques, and materials. These courses offer the student opportunities for specialized training in greater depth than can be offered in a general course. These courses will vary from semester to semester depending on student interest, industry developments, and need for specialized training. See class schedule for current offerings. (CSU) (Degree Credit)
- CRTV 199 F Cinema-Radio-TV Independent Study** **1-3 Units**  
 54-162 independent study hours per term. This course is designed for students who wish to increase their knowledge of cinema, radio or television through individual study. Project with written report or outside reading with written report is required. Independent production with staff supervision may be approved. (CSU) (UC review required) (Degree Credit)
- CRTV 227 F Intermediate Screenwriting** **3 Units**  
**Prerequisite(s):** CRTV 127 F with a grade of C or better  
 54 hours lecture per term. The application of concepts and practices used in the various types of dramatic writing for television and motion picture production in the completion of a feature length screenplay that meets industry standards. Students work from original student concept and first 20 pages developed in CRTV 127 F to finish a fully developed screenplay that is ready for professional submittal. (CSU) (Degree Credit)
- CRTV 235 F On-Air Radio Broadcasting** **3 Units**  
**Prerequisite(s):** CRTV 122 F and CRTV 135 F with a grade of C or better  
 18 hours lecture and 108 hours lab per term. This course includes daily broadcast preparation and presentation of on-the-air programs. Students gain actual on-the-air experience on College FM station, KBPK, 90.1 MHz. (CSU) (Degree Credit)
- CRTV 236 F On-Air Radio Broadcasting - Intermediate** **3 Units**  
**Prerequisite(s):** CRTV 235 F with a grade of C or better  
 18 hours lecture and 108 hours lab per term. This course builds intermediate on-air skills, and includes the developing and writing of material for broadcast and the production, editing and presentation of materials on the air and on the internet. Students will program original long form music segments. Students gain increased proficiency in on-air broadcasting on College FM radio station KBPK, 90.1 MHz, and are heard worldwide on KBPK's Internet stream. Students will also analyze the effectiveness of on-air broadcasts. (CSU) (Degree Credit)
- CRTV 237 F Advanced On-Air Radio Broadcasting** **3 Units**  
**Prerequisite(s):** CRTV 236 F with a grade of C or better  
 18 hours lecture and 108 hours lab per term. This course includes long-form music interview with instrumental and vocal recording artists in various genres, including jazz, country, rock and roll, electronic music, hip-hop and classical. Students gain actual on-air experience on college station (KBPK) and internet radio. (CSU) (Degree Credit)
- CRTV 245AF Digital Editing, Graphics and Effects** **3 Units**  
**Prerequisite(s):** CRTV 157 F with a grade of C or better  
 This course builds on the knowledge and skills received in CRTV 157 F. Students learn the aesthetics and techniques of incorporating graphics and special effects while practicing advanced non-linear video editing skills. (CSU) (Degree Credit)

**CRTV 245BF Advanced Digital Editing, Graphics and Effects 3 Units****Prerequisite(s):** CRTV 245AF with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course is designed to provide students with more advanced training in non-linear editing, incorporating graphics, audio mixing and utilizing special effects in editing. Special emphasis will be placed on in-depth knowledge of equipment, speed, accuracy, aesthetics and special effects. (CSU) (Degree Credit)

**CRTV 280 F Television Production Workshop 2-5 Units****Prerequisite(s):** CRTV 150 F with a grade of C or better.

18 hours lecture, 18 hours lab and 36-90 hours arranged lab per term. In this course, students participate as crew members on Media Services and Communication Department cable and campus productions utilizing four camera remote van, lab and EFP Equipment. Instruction in equipment operation, production management and production design. The course prepares students for employment in the industry through development of advanced hands-on skills and in-depth, varied production experience. (CSU) (Degree Credit)

**CRTV 290 F Internship in Communications I 2-4 Units**

18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through internships/employment in radio and television stations and television and film industry-related companies. (CSU) (Degree Credit)

**CRTV 291 F Internship in Communications II 2-4 Units****Prerequisite(s):** CRTV 290 F with a grade of C or better

18 hours lecture and 60-180 hours of supervised unpaid internship or 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (Degree Credit) (CSU)

**CRTV 292 F Internship in Communications III 2-4 Units****Prerequisite(s):** CRTV 291 F with a grade of C or better

18 hours lecture and 90-270 hours of employment or unpaid internship per term. This course is designed to give the student the skills needed to market themselves as professionals in the entertainment and communication industries. (CSU) (Degree Credit)

**CRTV 293 F Internship in Communications IV 2-4 Units****Prerequisite(s):** CRTV 292 F with a grade of C or better

18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course is designed to help the students who are interning to transition into working as independent contractors in the communication and entertainment related industries. (CSU)

**CRTV 299 F Cinema-Radio-Television Independent Study 1-3 Units**

54-162 hours of independent research or lab per term. This course is designed for students who wish to explore another topic or delve deeper into a topic that they explored in CRTV 199 F. Study must include project or written report in the area of cinema, radio or television. (CSU) (Degree Credit)

## Communication Studies (COMM)

**COMM 100 F Public Speaking****3 Units**

54 hours lecture per term. This course is designed to give students concentrated opportunities to communicate their ideas. Emphasis is on developing the speaker's ability to present original subject matter. This is accomplished by the preparation and presentation of four to six informative and persuasive speeches, as well as various in-class assignments and exercises to develop speaking proficiency by skillfully using logic and reasoning. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: COMM 110)

**COMM 105 F Interpersonal Communication****3 Units**

54 hours lecture per term. This course explores the variables of the interpersonal communication process as they occur in day-to-day, face-to-face interaction. Topics include self-concept, perception, listening, verbal and non-verbal communication, assertive communication and conflict resolution. Material is presented through lecture, experiential activities, and group discussion. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: COMM 130)

**COMM 120 F Intercultural Communication****3 Units**

54 hours lecture per term. This course explores the variables of human symbolic interaction as they occur between persons of differing cultural orientations. This course is theoretical in nature, but will also deal with applied concepts for more successful interaction with other cultures. The scope of the content will encompass the basic areas necessary to involve the student in a critical assessment of how cultures differ in both verbal and non-verbal behaviors; how needs, values and goals are dictated by cultural influences; how interactions can be improved between cultures through a perceptual awareness of these differences. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: COMM 150)

**COMM 124 F Small Group Communication****3 Units**

54 hours lecture per term. This course is an introduction to theoretical and applied concepts in small group communication through participation, observation, analysis and evaluation of group processes. Elements of small group behavior to be studied include leadership, roles, norms, networks, message systems, interpersonal needs, decision making, and conflict management. This course includes theory and practice of public speaking. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: COMM 140)

**COMM 135 F Essentials of Argumentation****3 Units**

54 hours lecture per term. This course will help an individual develop critical thinking abilities and effective logical support for oral advocacy. The course serves as an introduction to theoretical and applied concepts in argumentation. In-class student presentations will be used to evaluate course areas of research, reasoning, organization, refutation and issue analysis. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: COMM 120)

**COMM 138 F Forensics****2 Units**

18 hours lecture and 54 hours lab per term. This course trains students to participate in intercollegiate speech tournaments and public community programs. Areas to be covered include expository speaking, persuasive speaking, impromptu and extemporaneous speaking, oral interpretations, and debate. Field trips and involvement in student activities will be required. Course may be taken four times for credit. (Degree Credit) (CSU) (C-ID: COMM 160B)



# Computer Information Systems (CIS)

## **CIS 100 F Introduction to Personal Computers 4 Units**

72 hours lecture per term. This course introduces students as well as the business professional to the use of the personal computer using state-of-the-art software. Course material includes computer literacy, information literacy, concepts, hardware, software, information systems, structured design techniques, overview of the computer industry, ethics and current issues including virus protection and prevention. Students will also learn how to use the Windows operating system, Microsoft Office (Word, Excel, PowerPoint, Access) and the Internet as it relates to Microsoft Office. This course will satisfy the Area E General Education Requirements for transfer to CSU or UC. (Degree Credit) (CSU) (UC) AA GE, CSU GE

## **CIS 100HF Honors Introduction to Personal Computers 4 Units**

72 hours lecture per term. This Honors-enhanced course introduces students as well as business professionals to the use of the personal computer using state-of-the-art software. Course material includes computer literacy, information literacy, concepts, hardware, software, information systems, structured design techniques, overview of the computer industry, ethics and current issues including virus protection and prevention. Students will also learn how to use the Windows operating system, Microsoft Office (Word, Excel, PowerPoint, Access) and the Internet as it relates to Microsoft Office. (Degree Credit) (CSU)

## **CIS 102 F Introduction to Open Source Software 3 Units**

54 hours lecture per term. This course teaches students to use various Open Source software on a Windows computer. Topics include finding Open Source Software, downloading and installing software, and using typical packages like Open Office and Open CD. Students will also learn how to participate in the Open Source community. (Degree Credit) (CSU)

## **CIS 103 F Computer Keyboarding 2 Units**

36 hours lecture and 18 hours lab per term. This is course is beginning keyboarding for students who wish to learn alphanumeric keyboarding and the 10-key pad. Individualized assignments will help students achieve increased speed and accuracy. (Degree Credit) (CSU)

## **CIS 104 F Presentation Graphics 3 Units**

54 hours lecture and per term. This course is an introduction to business presentation graphics. Topics include planning presentations, creating business presentations and templates, enhancing presentations with graphics, sound, animation, transition, and video and using presentations on a Web server. State-of-the-art software will be used. (Degree Credit) (CSU)

## **CIS 106 F Beginning Spreadsheet (MS Excel) 3 Units**

54 hours lecture per term. This course provides an introduction to spreadsheets in the solution of business problems. Students will create, format and print worksheets that include formulas, functions, charts, relative and absolute cell references, what-if analysis, and 3D worksheets. Students will learn how to create Excel Web pages, design and manipulate Excel tables, and work on group collaboration projects. State-of-the-art software will be used. (Degree Credit) (CSU)

## **CIS 107 F Introduction to Operating Systems 3 Units**

54 hours lecture per term. This course is designed to introduce the operating system on the personal computer and personal computer security. The course will cover the fundamentals of the graphical user interface, mouse operations, how to manipulate the interface, how to use help, search, launch applications, manage files and folders and add/delete hardware and software. Additional topics include Linux, OSX, the Cloud, using end point security software, how virus programs infect computers, and how to protect computers from malicious programs. (Degree Credit) (CSU)

## **CIS 109 F Personal Computer Security 2 Units**

27 hours lecture and 27 hours lab per term. This course introduces the student to computer security topics on personal computers and on the Internet. Students will learn how to protect their own personal computers from malicious software to include trojans, malware, adware, viruses, and other dangerous software. Students will understand current hacking techniques and approaches and learn to protect their personally identifiable information (PII) on the Internet and how to securely send information. (Degree Credit) (CSU)

## **CIS 111 F Introduction to Information Systems 4 Units**

72 hours lecture per term. This course exams information systems and their role in business. Focus will be on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems. (Degree Credit) (CSU) (UC) AA GE (C-ID: BUS 140)

## **CIS 111HF Honors Introduction to Information Systems 4 Units**

72 hours lecture per term. This Honors-enhanced course is an examination of information systems and their role in business. This course will focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects, developing computer-based solutions to business problems. As an Honors course, this class will include enrichment content and activities requiring independent problem-solving and critical thinking skills and collaborative group projects and presentations. (Degree Credit) (CSU) (UC) AA GE (C-ID: BUS 140)

## **CIS 120 F Project Management I 3 Units**

54 hours lecture per term. This course covers project management application skills including planning project scope, analyzing project risk, creating project schedules, communicating project information, managing resources, adding tasks and durations, changing relationships, tracking progress, and closing the project. Also covered are customizing project management software, web resource, and project management certifications. State-of-the-art software will be used. (Degree Credit) (CSU)

## **CIS 123 F Beginning Word Processing (MS Word) (formerly Word Processing) 3 Units**

54 hours per term. This course is designed to teach the student how to use a word processing program to create, edit, and format documents. This course covers the fundamental operations of word processing: typing text, saving, editing, copying, moving, printing, formatting, margins, tabs, footers and headers, footnotes, vertical and horizontal alignment and line spacing. Students will also learn how to create an index, table of contents, and create complex documents that include images. (Degree Credit) (CSU)

## **CIS 124 F Advanced Word Processing (MS Word) (formerly Advanced Word) 3 Units**

**Advisory:** CIS 123 F.

54 hours lecture per term. This course teaches advanced concepts and techniques for Microsoft Word. Topics include working with long documents, complex formatting, collaborating, and automating Word documents. (Degree Credit) (CSU)

**CIS 130 F Systems Analysis and Design****3 Units**

54 hours lecture per term. This course is designed to introduce the student to 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. (Degree Credit) (CSU)

**CIS 142 F Database I****3 Units**

36 hours lecture per term. This course is designed to teach use of state-of-the-art personal database software. The course will cover introductory concepts including database structure and design, editing database records, sorting/indexing records, query techniques, custom form creation, database report design and printing, database relational techniques, and general file management techniques. (Degree Credit) (CSU)

**CIS 148 F Introduction to Personal Computer Communications****2 Units**

**Advisory:** Familiarity with sending and receiving email.

27 hours lecture and 27 hours lab per term. This course is an introduction to personal electronic communications and management using state-of-the-art email and scheduling software. Students learn how to connect the software with internet email servers and how to receive and manage email. Students will also learn to manage an electronic calendar, schedule appointments and manage appointment information. (Degree Credit) (CSU)

**CIS 149 F Internet Entertainment****3 Units**

54 hours lecture per term. This course teaches the various elements of entertainment on the Internet. These include how media companies are using the Internet for content distribution and marketing, how various types of Internet Entertainment programs work th client operating systems like Windows, and how to configure clients to use various Internet Entertainment packages. (Degree Credit) (CSU)

**CIS 150 F Introduction to the Internet****3 Units**

54 hours lecture per term. This course is an introduction to the organizational, operational, and technical aspects of the internet. Students will learn how to use a personal computer to access internet and the World Wide Web. Topics include an overview of personal computer operations, the history and philosophy of the internet and its services, configuring a personal computer to connect to the internet, selecting an internet service provider, sending and receiving electronic mail (email), locating network resources using search engines, participating in discussion groups using Web 2.0, downloading internet software. Other topics include developing, creating and posting personal and business web pages using the hypertext markup language (HTML), evaluating internet materials for accuracy and reliability and citing web and internet resources. (Degree Credit) (CSU)

**CIS 152 F Web Design I (formerly Web Page Design II)****3 Units**

54 hours lecture per term. This course presents introductory and advanced topics in Web Page Design. Students will learn how to create web pages that include style sheets, use multimedia objects, plan and manage large-scale websites, use client plug-ins, work with CGI, Java, and other server side technologies, design effective user interfaces, and use elements of dynamic HTML. Other topics include using JavaScript, working with different types of graphic objects, and working with the Document Object Model. Emphasis is placed on learning the Hypertext Markup Language, using and editing graphic files, and creating various types of web pages. (Degree Credit) (CSU)

**CIS 153 F Business Web Graphics****3 Units**

54 hours lecture per term. This course teaches the skills necessary to create business graphics for web pages. Topics include graphic file formats used on web pages, designing and manipulating web components using a graphical editor, using graphical elements in web page design, and generating CSS layers as a result of image slicing. Students will also learn how to effectively optimize images, create hyperlinks from image comps, create navigation elements, add animation, and export HTML and images as part of the overall design of a business web page. (Degree Credit) (CSU)

**CIS 154 F JavaScript Programming I****3 Units**

54 hours lecture per term. This course teaches the student to use the JavaScript programming language with Hyper-Text Markup Language (HTML) pages. Emphasis is placed on creating HTML pages that include JavaScript programs. The student will learn the basic syntax of the JavaScript language, how to create JavaScript programs inside HTML documents, and how to use JavaScript programs to enhance Web pages. (CSU) (Degree Credit)

**CIS 155 F Web Page Multimedia Design I****3 Units**

**Advisory:** CIS 152 F

This course introduces students to Multimedia Web Design using Adobe Flash CS5 (or current version). Topics include how to create animations and movies for integration into websites and how to create a full website using Flash. Various animation techniques, adding sound, and basic ActionScript for controlling the flow of the movie will be taught. (Degree Credit) (CSU)

**CIS 157 F Web Design II (formerly Dreamweaver I)****3 Units**

**Advisory:** CIS 152 F.

54 hours lecture per term. This course covers using Dreamweaver to create Web pages. Topics include creating web pages with graphics, links, tables, forms, and Javascript elements. Students will also learn how to import files and graphics into Dreamweaver from other programs. Students should have a working knowledge of the Internet. (Degree Credit) (CSU)

**CIS 159 F Introduction to XML****3 Units**

54 hours lecture per term. This course teaches the basic concepts of XML. Topics include the structure of an XML document, creating XML documents, using Data Definitions, and linking XML documents to other web components. Students should have a working knowledge of HTML. (Degree Credit) (CSU)

**CIS 160 F Introduction to Cyber Security (formerly Introduction to Computer Forensics)****3 Units**

54 hours lecture and 18 lab hours per term. In this course, students will be introduced to the complex world of cyber security and technology. Students will analyze security problems and practice simulated security activities. Topics will address technologies and security-related topics progressing from individual computers to more complex internet-based systems. (Degree Credit) (CSU)

**CIS 165 F Cyber Security and Networking and Web (formerly Computer Forensics and Networking)****3 Units**

**Advisory:** Basic knowledge of networking concepts.

54 hours lecture and 18 hours lab per term. This course teaches the student how to use computer forensic techniques and tools to investigate and reconstruct network-based data. Students learn the basic operation and structure of a computer network, the various network devices and their operation, and the tools used to investigate a network. Topics include trapping network data, retrieving and analyzing email, tracing network packets, and other security and forensic topics. (Degree Credit) (CSU)

**CIS 166 F Cyber Security and Operating Systems (formerly Operating Systems and Computer Forensics) 3 Units**

**Advisory:** CIS 160 F.

54 hours lecture and 18 hours lab per term. This course teaches students how to perform computer forensic analysis of data on the Windows, Linux, and Macintosh operating systems. Students will learn about the internals of the operating system, the potential security problems with the operating system, and how to capture static and live data from an operating system. Students will also learn to use some typical network software and hardware forensic tools and how to protect gathered data in a legally acceptable manner. (Degree Credit) (CSU)

**CIS 168 F Cyber Security Software Tools (formerly Tools for Computer and Network Forensics) 3 Units**

**Advisory:** Basic knowledge of C++

54 hours lecture and 18 hours lab per term. This course teaches students how to use various hardware and software tools to engage in computer and network forensics. Topics include installing, configuring, and using common open source forensic tools, building custom tool kits, modifying tools, and creating new tools. Students will learn how to use C++ to write custom computer and network forensic software tools. (Degree Credit) (CSU)

**CIS 170 F Cisco Networking 1 3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on network terminology and protocols. Local Area Networks (LANs), Wide Area Networks (WANs), Open System Interconnection (OSI) model, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. This course is offered through Cisco Local Academy and upon successful course completion, students will receive a certificate from Cisco. (Degree Credit) (CSU)

**CIS 171 F Ethical Hacking (formerly Network Intrusion and Detection) 3 Units**

**Advisory:** Basic knowledge of a network operating system and basic networking concepts

54 hours lecture and 18 hours lab per term. This course teaches ethical hacking through network intrusion and detection techniques. Students learn how computer network security is compromised by use of common intrusion tools. Students also learn how to detect such network intrusions and how to monitor and trap the intruder. Topics include how to successfully penetrate Windows and Linux networks and how to install and use open source tools to detect and protect from such penetration. (Degree Credit) (CSU)

**CIS 172 F Cisco Networking 2 3 Units**

**Prerequisite(s):** CIS 170 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course introduces students to router fundamentals, router setup and configuration, network management, routing and routed protocols, and network troubleshooting. Topics include: managing Cisco IOS software, Distance Vector Routing Protocols, TCP/IP suite error and control messages, basic router troubleshooting, and access control lists. This course is offered through Cisco Local Academy and upon successful course completion students receive a certificate from Cisco. (Degree Credit) (CSU)

**CIS 173 F Cisco Networking 3 3 Units**

**Prerequisite(s):** CIS 172 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course focuses on advanced IP addressing techniques, Variable Length Subnet Masking (VLSM), intermediate routing protocols (RIP v2, single-area OSPF, EIGRP), command-line interface configuration of switches, Ethernet switching, Virtual LANs (VLANs), Spanning Tree Protocol (STP) and VLAN Trunking Protocol (VTP). This course is offered through Cisco Local Academy and upon successful course completion, students will receive a certificate from Cisco. (Degree Credit) (CSU)

**CIS 174 F Cisco Networking 4 3 Units**

**Prerequisite(s):** CIS 173 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course focuses on advanced IP addressing techniques; Network Address Translation (NAT), Port Address Translation (PAT), and DHCP; WAN technology and terminology; PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking. This course is offered through Cisco Local Academy and upon successful course completion students will receive a certificate from Cisco. (Degree Credit) (CSU)

**CIS 176 F Web Page Layout with CMS 3 Units**

**Advisory:** CIS 152 F

54 hours lecture per term. This course provides students with the knowledge, skills, and hands-on experience to create, enhance, and maintain a website created with a content management system (CMS). Students will design sites with articles, blogs, links, news feeds, search components, and other plugins. Knowledge of HTML is highly recommended. (Degree Credit) (CSU)

**CIS 177 F Web Design III (formerly Dreamweaver II) 3 Units**

**Advisory:** CIS 157 F or ability to use current version of Dreamweaver to create standards compliant websites is strongly recommended.

54 hours lecture per term. This project-based, hands-on course uses intermediate development techniques in Dreamweaver to enhance business web pages. Topics include the use of style sheets to create custom classes, link styling, and position elements; manage template-controlled sites, and navigation element control and accessibility. Students will also learn to manage Dreamweaver extensions. (Degree Credit) (CSU)

**CIS 180 F Introduction to Networking Concepts 4 Units**

72 hours lecture per term. This class introduces the student to data communications and networking concepts used in businesses. Topics include the major components of data communications networks, local area networks, wide area networks, networking topologies, network protocols, inter-networking, and categorizing network operating systems. (Degree Credit) (CSU)

**CIS 181 F Computer Certification Preparation 3 Units**

Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course prepares students for industry standard certifications with both theoretical and practical lessons relating to microcomputer hardware and software. Emphasis is placed on how hardware components function together to make a microcomputer work properly, how software interacts with hardware, and practical methods to protect hardware and software. Topics include installing, configuring, and upgrading personal computer components and peripherals in a networked environment. (Degree Credit) (CSU)

- CIS 182 F Computer Certification Prep II** **3 Units**  
54 hours lecture per term. This course prepares students for industry standard certifications with both theoretical and practical lessons relating to computer hardware and software. Emphasis is placed on how software components function together to make a computer system work properly, how software interacts with hardware, and practice methods to protect hardware and software. Topics include installing, configuring, and upgrading software components in a networked environment. (Degree Credit) (CSU)
- CIS 183 F Network Security Fundamentals** **3 Units**  
*Advisory:* CIS 107 F and CIS 180 F  
54 hours lecture per term. This course is designed to provide students with an overview of network security, and covers terminology, technology, and software used with network security. Students will learn about communication security, infrastructure security and cryptography. Business plans for disaster recovery will be covered. (Degree Credit) (CSU)
- CIS 200 F Fundamentals of Computer Programming** **1 Unit**  
*Advisory:* Knowledge of elementary computer concepts  
18 hours lecture per term. This course will introduce basic programming terminology, concepts, and best practices related to computer programming. Students will learn the basics of writing programs using loops, statements, variables, and functions. Additional topics will include program design, flow charting, basic computer architecture and debugging techniques. (Degree Credit) (CSU)
- CIS 201 F Introduction to Python Programming** **3 Units**  
54 hours lecture per term. This course is an introduction to fundamental concepts and techniques for writing software in the Python programming language. This course covers the syntax and semantics of data types, expressions, exceptions, control structures, input/output, methods, classes and pragmatics of Python programming. (CSU) (Degree Credit)
- CIS 205 F Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)** **3 Units**  
*Advisory:* CIS 106 F or the ability to create and edit a spreadsheet  
54 hours lecture and 18 hours lab per term. This course teaches advanced concepts with Microsoft Excel. Topics include PivotTables and PivotCharts, using advanced statistical, logical, financial and lookup functions, creating macros, templates and styles and prepare workbooks for distribution. Use of collaboration tools and advanced analysis are included. (Degree Credit) (CSU)
- CIS 212 F Robotic Programming** **3 Units**  
54 hours lecture per term. This class teaches basic programming concepts by creating applications for physical robotic devices. Students will learn how to connect to these robotic devices, how to design a program that controls the device, and how to download their program to the device. Programming topics include looping, making decisions, variables, and arrays. (Degree Credit) (CSU)
- CIS 217 F Visual Basic Programming I** **4 Units**  
*Advisory:* CIS 100 F or an understanding of basic computer programming concepts  
72 hours lecture per term. This course covers the fundamentals of the Microsoft Visual Basic programming language. Emphasis is on variables, objects, events, methods, properties, control structures and error trapping. Forms, controls and basic use of an IDE are presented. An introduction to the development cycle, graphical user interface design principles, and documentation is provided. (Degree Credit) (CSU) (UC Credit Limitation)
- CIS 219 F Visual Basic Programming II** **3 Units**  
*Advisory:* CIS 217 F  
54 hours lecture per term. This course covers various specialized visual basic programming tasks including database management, component level programming, XML processing, distributed network programming, and embedded device programming. Students learn to create programs that read and write to databases, which are structured as components, process XML files, and can be distributed across a network. (Degree Credit) (CSU)
- CIS 220 F Web Server Programming** **3 Units**  
*Advisory:* CIS 152 F.  
54 hours lecture per term. This course covers topics on Web programming for the Internet and Intranets. Topics include an explanation of how programs are run across the Internet, the various types of Web programs, and how information is loaded into network databases. Programming for both clients and servers will be covered in this class. Students should have a background in Web page design with HTML and have a background in Visual Basic programming. (Degree Credit) (CSU)
- CIS 221 F Introduction to C# Programming** **3 Units**  
54 hours lecture per term. Students will learn basic programming concepts including variables, logical constructions, and data access. Students will also learn to use the C# programming language to create graphical user interface programs, web programs, and database programs. (Degree Credit) (CSU)
- CIS 222 F Computer Scripting (formerly CGI/Perl Scripting)** **3 Units**  
*Advisory:* CIS 152 F.  
54 hours lecture and 36 hours lab per term. This course teaches the Perl scripting language. Topics include using Perl in Web Pages with CGI, basic Perl syntax, data types and functions. Topics also include using Perl with files and databases. Students must have a working knowledge of HTML. (Degree Credit) (CSU)
- CIS 223 F Programming in C++** **3 Units**  
*Advisory:* CIS 226 F,  
This course is designed for students who have some experience with structured programming techniques. Students will learn the C++ programming language as it applies to business applications. Documenting, coding, entering, computing, and executing programs will take place on the personal computer. (Degree Credit) (CSU) (UC)
- CIS 226 F Java Programming I** **4 Units**  
72 hours lecture per term. This course is an introduction to designing, creating, and debugging Java programs. Students will learn the syntax of the Java programming language, how to design programs using Object Oriented Analysis and Design and how to create stand-alone programs. Emphasis is placed on program design, basic programming constructs including classes, objects, decision structures, repetition structures and inheritance. (Degree Credit) (CSU) (UC)
- CIS 227 F Advanced C# Programming** **3 Units**  
*Advisory:* CIS 221 F.  
54 hours lecture per term. This is an advanced course in C# programming. Students learn how to create C# networking programs, Web Server programs, complex database programs and mobile applications. (Degree Credit) (CSU)

- CIS 228 F Java Programming II** 4 Units  
*Advisory:* CIS 107 F and CIS 226 F.  
 72 hours lecture per term. This course covers advanced topics in Java programming. Topics include collections, interfaces, abstract classes, recursion and databases. Students will learn to flowchart user requirements. Students should be familiar with Microsoft Windows and programming. Students should be familiar with Microsoft Windows and with the Java programming language. (Degree Credit) (CSU)
- CIS 229 F XML Programming** 3 Units  
*Advisory:* CIS 159 F.  
 54 hours lecture and 18 hours lab per term. This course covers XML programming. Topics include using XML parsers in JavaScript and Java, using XML for file input/output, and connecting to XML databases. Students must have a working knowledge of XML. (Degree Credit) (CSU)
- CIS 230 F PHP and MySQL Programming** 3 Units  
*Advisory:* CIS 152 F and CIS 154 F  
 54 hours lecture per term. This course teaches how to use the PHP Web programming language and MySQL database program to create interactive, database-driven Web sites. Students learn how to create PHP enhanced pages, how to install and configure MySQL, and how to connect Web clients to the database. (Degree Credit) (CSU)
- CIS 240 F Intro to Mobile Applications** 4 Units  
*Advisory:* CIS 226 F.  
 72 hours lecture per term. This course introduces students to creating mobile applications (apps) through software design, program logic, code development and testing, and utilizing appropriate software development tools. Course material includes fundamentals of mobile design, utilizing graphics and animation, developing interactive apps, building multi-screen applications and how to deploy and publish mobile apps. Students will also learn to use advanced software development tools. (Degree Credit) (CSU)
- CIS 242 F Database II** 3 Units  
*Advisory:* CIS 142 F.  
 54 hours lecture per term. This course teaches advanced topics in personal databases using state-of-the-art database software. Students will learn how to design and implement complex databases, how to create complex queries and how to use Structured Query Language, how to create personal databases with other applications, and how to write database macro programs. Other topics include the theory of database design, interfacing personal databases with external databases, and creating internet personal databases. Students in this course should have fundamental skills in using a personal database. (Degree Credit) (CSU)
- CIS 255 F Web Page Multimedia Design II** 3 Units  
*Advisory:* CIS 155 F.  
 54 hours lecture per term. This course teaches advanced concepts in Flash. Students learn how to write ActionScript and use advanced features in Flash to create sophisticated websites and animations. Topics include creating dynamic drop-down menus, pre-loaders, working with external movie files and sound, and connecting to a MySQL database. Students should have a working knowledge of beginning Flash concepts. (Degree Credit) (CSU)
- CIS 270 F SQL Server Administration** 3 Units  
*Advisory:* CIS 180 F and CIS 107 F.  
 54 hours lecture and 18 hours lab per term. This course introduces students to the administration of Microsoft SQL Server. Students learn an overview of the SQL server environment, installing and administering SQL server, user and database management, and operating SQL server in a networking environment. Emphasis is placed on installing and administering SQL server, setting up user accounts and use access, and managing resources. (Degree Credit) (CSU)
- CIS 280 F Introduction to Oracle: SQL and PL/SQL** 3 Units  
*Advisory:* CIS 142 F with a grade of "C" or better  
 54 hours lecture and 18 hours lab per term. This course offers students an extensive introduction to database technology. The class covers the concepts of relational databases and the powerful SQL and PL/SQL programming languages. Students are taught to create and maintain database objects and to store, retrieve, and manipulate data. In addition, students learn to create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Demonstrations and hands-on practice reinforce the fundamental concepts. (Degree Credit) (CSU)
- CIS 281 F Introduction to Networking Hardware** 3 Units  
 54 hours lecture and 18 hours lab per term. This course builds on students' knowledge of basic networking concepts and theory through hands-on experience. The course will provide students with an in-depth understanding of network infrastructure, standards and technologies. Students will gain hands-on experience with current network design issues, protocols, and components. Hands-on experience will also include working with wired and wireless standards and network components such as servers, routers, switches, hubs and firewalls. (Degree Credit) (CSU)
- CIS 285 F Windows Server** 3 Units  
*Advisory:* CIS 107 F and CIS 180 F  
 54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Server and enterprise networks. Students learn an overview of the Windows environment, installing and administering servers, domain management and networking. Emphasis is placed on managing a Windows network, setting up user accounts and user access, and managing resources. (Degree Credit) (CSU)
- CIS 286 F Web Server Management** 3 Units  
*Advisory:* CIS 180 F and CIS 107 F with a grade of "C" or better  
 54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Information Server and enterprise networks. Students learn an overview of the Windows environment, installing and administering Internet information server, domain management and networking. Emphasis is placed on managing Internet information server, setting up user accounts and user access, and managing resources. (Degree Credit) (CSU)
- CIS 287 F Exchange Server** 3 Units  
*Advisory:* CIS 180 F and CIS 040 F.  
 54 hours lecture and 18 hours lab per term. This course introduces students to the administration of Microsoft Exchange Server. Students learn an overview of the Exchange server environment, installing and administering Exchange server, user and database management, and operating Exchange server in a networking environment. Emphasis is placed on installing and administering Exchange server, setting up user accounts and user access, and managing resources. (Degree Credit) (CSU)
- CIS 289 F Windows Active Directory** 3 Units  
*Advisory:* CIS 107 F and CIS 180 F  
 54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Active Directory and enterprise networks. Students learn an overview of the Windows environment, installing and administering DNS servers, Active Directory management and networking. Emphasis is placed on managing a Windows Active Directory network, setting up user accounts and user access and managing resources. (Degree Credit) (CSU)

**CIS 290 F Linux and UNIX Operating System****3 Units****Advisory:** CIS 107 F.

54 hours lecture and 18 hours lab per term. This course is an introduction to the Linux/UNIX operating system. Topics include configuring UNIX, using Linux/UNIX utilities to manage files and resources, and using Linux/UNIX on a network. Other topics include configuring common UNIX graphical user interfaces, solving operating system problems, and interfacing Linux/UNIX with other operating systems. Students should be familiar with another operating system such as Microsoft Windows or Windows NT. (Degree Credit) (CSU)

**CIS 295 F Computer Information Systems Internship****2-4 Units**

18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in Computer Information Systems. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

**CIS 298 F Advanced Computer Topics****3 Units**

54 hours lecture per term. This course introduces advanced topics for students who wish to increase their knowledge and skills in various areas of computer information systems. Emphasis is placed on the current and future trends of information technology in today's computer industry. (Degree Credit) (CSU)

## Computer Information Systems-Gaming (CISG)

**CISG 100 F Introduction to Computer Game Design****3 Units**

54 hours lecture per term. This is an introductory survey class in computer game design. Students will learn the basics of how computer games are designed and created. This includes an overview of computer game graphics, computer game programming, game level design, game music development, computer game strategy and playability, and the entire computer game development process as well as the current gaming business. (Degree Credit) (CSU)

**CISG 101 F Advanced Computer Game Design****3 Units****Advisory:** CISG 100 F.

54 hours lecture per term. This course teaches students advanced topics in game design. Students learn how to implement a game design process, how to design for narrative, characters and puzzles. Students will also learn how to design games for a variety of game environments including multiplayer games, virtual reality games and multiplayer games. This course is a continuation of topics in CISG 100 F. (Degree Credit) (CSU)

**CISG 110 F Introduction to Programming for Computer Games****3 Units****Advisory:** Basic knowledge of a procedural or object-oriented programming language

This is an introductory survey course on computer game programming. Students will learn the basic game programming design process, the use and creation of game programming tools, basic game data structures, programming artificial intelligence, graphics programming, online and multi-user game design, 3-D engine design, and how game programmers interact with game designers. (Degree Credit) (CSU)

**CISG 112 F Foundations of Game Engine Programming****3 Units****Advisory:** Basic knowledge of a procedural or object-oriented programming language.

54 hours lecture per term. This is an introductory survey course on computer game engines. Students will learn the basic features of game engines, specific features of different kinds of game engines, and how to use game engines to create computer games. (Degree Credit) (CSU)

**CISG 160 F C# for Game Programming****3 Units****Advisory:** Basic knowledge of C# programming language 54 hours lecture per term.

This course teaches use of the C# programming language to create computer games. Students will review the C# programming language, learn how C# uses .NET resources, and learn how to use DirectX. Topics also include using 3-D, sound, and animation. (Degree Credit) (CSU)

**CISG 165 F C++ for Game Programming****3 Units****Advisory:** Knowledge of basic C++ programming

This course teaches students how to use C++ to write computer games. Topics include a review of basic C++, how to use various data structures in C++, how to access hardware devices, how to use various graphics libraries, and how to use basic networking resources in C++. Students will learn how to create basic graphics and text-based games in C++. (Degree Credit) (CSU)

**CISG 170 F Java for Game Programming****3 Units****Advisory:** Basic knowledge of Java programming language.

54 hours lecture and 18 hours lab per term. This course teaches students how to use Java to write computer games. Topics include a review of basic Java, how to use various data structures in Java, how to access hardware devices, how to use various graphics libraries, and how to use basic networking resources in Java. Students will learn how to create basic graphics and text-based games in JAVA. (Degree Credit) (CSU)

**CISG 175 F Multimedia Game Programming****3 Units****Advisory:** Knowledge of Flash

This course teaches students how to use various multimedia tools to create games. Topics include a review of basic multimedia and virtual reality concepts, basic multimedia and VR APIs, and writing programs that use these APIs. (CSU) (Degree Credit)

**CISG 182 F DirectX Graphics Programming****3 Units****Advisory:** Basic knowledge of C++ and .NET

NET 54 hours lecture per term. This course introduces students to DirectX graphics programming tools using C++. Students learn the basics of DirectX, the general structure of the graphic libraries, and how to use DirectX to create 2-D and 3-D graphics, transform graphics, manage sound, and how it is used to create computer games. (CSU) (Degree Credit)

**CISG 185 F Artificial Intelligence in Game Programming****3 Units****Advisory:** General knowledge of the C++ or Java programming language.

This course introduces the use of Artificial Intelligence techniques in game programming. Students learn the foundation of computer Artificial Intelligence techniques, and how such techniques are implemented in computer code and how they are used in different kinds of computer games. (Degree Credit) (CSU)

**CISG 190 F Programming Multiuser Online Games 3 Units**

**Advisory:** Basic knowledge of a modern object-oriented programming language and general network concepts

54 hours lecture per term. This class is an introduction to programming online multi-player games. Students learn basic networking technology, network programming, and are introduced to the operation of network servers. Students also learn how to write code to link client computer games with network game servers and how to create server side game scripts. (Degree Credit) (CSU)

## Computer Science (CSCI)

**CSCI 123 F Introduction to Programming Concepts in C++ 4 Units**

**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 142 F, or MATH 143 F, with a grade of C or better.

72 hours lecture per term. This course is an introduction to the basic principles of programming using C++ as the development tool. Topics include the structure and design of algorithms, input/output, branching structures, functions, recursion, built-in data types, arrays, structures, files, pointers and elementary operations on linked structures. The object-oriented programming paradigm will be introduced. Topics include encapsulation, polymorphism, libraries, streams, inheritance and abstract data types. Students will design algorithms, write external and internal documentation and design and write source code in C++. (Degree Credit) (CSU) (UC) AA GE

**CSCI 133 F Data Structures in C++ 4 Units**

**Prerequisite(s):** CSCI 123 F with a grade of C or better

72 hours lecture per term. This is a course in algorithm design and data structures implemented using C++. Data structures examined are arrays, linked lists, stacks, queues, trees, tables, and graphs. Algorithm topics include hashing, sorting, heaps, searches and algorithm efficiency using Big-O notation. Students will create and modify class libraries to implement these structures. (Degree Credit) (CSU) (UC) (C-ID: COMP 132)

**CSCI 223 F C Language for Math and Science 4 Units**

**Prerequisite(s):** CSCI 123 F with a grade of C or better or one prior programming language

72 hours lecture per term. This course is an introduction to the C programming language. One of the latest C compilers will be used on a personal computer. Topics include data types, functions, pointers, bit manipulation and file I/O. Students will design, code and test program applications in the mathematics, scientific and engineering environments. (Degree Credit) (CSU) (UC)

**CSCI 241 F Computer Organization and Assembly Language Programming 4 Units**

**Prerequisite(s):** CSCI 133 F or CSCI 223 F with a grade of C or better.

72 hours lecture per term. This course is an introduction to assembly language programming. It includes reviews of computer organization, programming techniques and concepts, addressing techniques, input/output, hardware architecture, and data structures. (Degree Credit) (CSU) (UC)

## Construction Technology (CSTR)

**CSTR 005 F Construction Technology Lab 0.5-2 Units**

**Corequisite(s):** CSTR 006 F or CSTR 007 F or CSTR 014 F or CSTR 015 F or CSTR 016 F or CSTR 020 F or CSTR 022 F or CSTR 028 F or CSTR 030 F or CSTR 031 F or CSTR 032 F or CSTR 033 F or CSTR 034 F or CSTR 035 F or CSTR 038 F or CSTR 040 F or CSTR 041 F or CSTR 042 F or CSTR 050 F or CSTR 060 F or CSTR 065 F or CSTR 100 F or CSTR 102 F or CSTR 104 F or CSTR 108 F or CSTR 110 F or CSTR 112 F or CSTR 116 F, with a grade of C or better.

Open Entry/Open Exit. 27-108 hours lab per term. This course offers students the opportunity to further develop their skills at hand and power tool operations, and to devote more time to construction projects. One-half unit credit will be given for each twenty-seven hours of lab participation. (Degree Credit)

**CSTR 006 F Residential Plumbing and Mechanical Systems 3 Units**

54 hours lecture per term. This course covers the fundamentals of residential plumbing, heating, ventilation and air conditioning (HVAC). (Degree Credit)

**CSTR 007 F Residential Electrical Systems 2 Units**

27 hours lecture and 27 hours lab per term. This course is an introduction to load center sizing, wiring circuits and grounding systems used in residential construction. Lab exercises will cover the wiring of lighting and power circuits, dedicated circuits, grounding and troubleshooting. (Degree Credit)

**CSTR 014 F Contractors License Law 3 Units**

54 hours lecture per term. This course covers the problems in the legal and practical aspects of contracting: Contractors' License Law, the Mechanic's Lien Law, labor code, Worker's Compensation, and Insurance. Business management for both the private and public sector will also be covered. This course will prepare the student to pass the Law and Business Exam required for a Contractor's License in the State of California. (Degree Credit)

**CSTR 015 F Construction Management 3 Units**

54 hours lecture per term. This course covers the organization and problems associated with managing a building construction business. Topics will include sales, bidding, contracts, purchasing, scheduling, safety, and community relations. (Degree Credit)

**CSTR 016 F Business Administration for the Construction Industry 3 Units**

54 hours lecture per term. This course provides the student with instruction in the practical aspects of business administration concepts and practices within the construction industry. The course surveys successful operating techniques, business structure, business plans, ownership, accounting, marketing, finance, taxation and business regulations. (Degree Credit)

**CSTR 020 F Remodeling and Additions Construction I 4 Units**

**Prerequisite(s):** CSTR 100 F with a grade of C or better.

36 hours lecture and 108 hours lab per term. This course is an introduction to the fundamentals of residential room additions and remodeling construction with an emphasis on print reading, starting the job, tools, materials, scheduling, estimating, job progress and people relations. Instructions on tie-ins, foundations, plumbing, framing, roofing, electrical and mechanical areas will also be covered. (Degree Credit)

**CSTR 022 F Remodeling and Additions Construction II 4 Units**

**Prerequisite(s):** CSTR 102 F and CSTR 102 F, with a grade of C or better  
36 hours lecture and 108 hours lab per term. This course will provide advanced experiences in finish work in remodeling and additions to include patching and finish carpentry, electrical, plumbing, and heating. (Degree Credit)

**CSTR 028 F Introduction to Alternative Energy 3 Units**

54 hours lecture per term. This course provides an overview of the world energy situation and a study into alternate energy sources. Solar water heating, solar space heating and cooling, photovoltaics, geothermal, wind generators, nuclear, transportation energy types and others will be studied. (Degree Credit)

**CSTR 030 F Construction Plans Reading (formerly Construction Blueprint Reading) 3 Units**

54 hours lecture per term. This course provides an interpretation of architectural working drawings as they relate to residential and light commercial construction. The meaning of various lines, symbols, and conventions as well as construction documents will be covered. Students entering this program may enter a variety of construction related fields such as Carpentry, Masonry, or Construction Inspection. (Degree Credit)

**CSTR 031 F International Building Code 3 Units**

54 hours lecture per term. This course covers topics from the most recently-published International Building Code. This course is designed to give the student a view of the origins of the codes, why we need them, who enforces them, and generally how they work. Students will study the building codes as they pertain to commercial and industrial construction. Field trips may be required outside of regularly-scheduled class time. (Degree Credit)

**CSTR 032 F Uniform Plumbing Code 3 Units**

54 hours lecture per term. This course covers topics from the most recent Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials. (Degree Credit)

**CSTR 033 F Commercial Construction Blueprint Reading 3 Units**

**Advisory:** Knowledge and understanding of residential blueprints. 54 hours lecture per term. This course emphasizes the interpretation of commercial architectural drawings as they relate to commercial construction industry. Contract documents, specifications, site work, structural steel construction, reinforced concrete, mechanical systems, and electrical systems will be covered. (Degree Credit)

**CSTR 034 F National Electrical Code 3 Units**

54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent National Electrical Code as published by the National Fire Protection Association. (Degree Credit)

**CSTR 035 F California Accessibility and Energy Codes 3 Units**

54 hours lecture per term. This course offers an interpretation and application of the California Code of Regulations (Title 24) as it pertains to various types of structures within the building industry. Special emphasis will be placed on California Energy Regulations and modifications for the disabled for accessibility requirements. Field trips may be required during class time. (Degree Credit)

**CSTR 038 F Uniform Mechanical Code 3 Units**

54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent Uniform Mechanical Code as published by the International Conference of Building Officials. This course will study the codes related to commercial and industrial construction. (Degree Credit)

**CSTR 039 F Commercial Mechanical Code 3 Units**

54 hours lecture per term. This course has been designed for the individual who deals with the design of heating, cooling, ventilation and refrigeration in larger, more complex type buildings. Training received in this course will make the individual aware of the areas where the Building and Mechanical Codes overlap. (Degree Credit)

**CSTR 040 F Building Design - Hazard Materials 3 Units**

54 hours lecture per term. This course is designed to introduce the student to the provisions of the Building and Fire Codes affecting the storage, handling and use of hazardous materials. Emphasis will be placed on the requirements for the safety aspects of the codes and recognized standards for solutions. Instruction will focus on problem solving with compliance to the building standards. (Degree Credit)

**CSTR 041 F International Residential Code 3 Units**

54 hours lecture per term. This course covers topics from the most recently-published adoption of the International Residential Code. Students will study the International Residential Code (IRC) as a comprehensive, stand-alone residential code that creates minimum regulations for one- and two-family dwellings of three stories or less. This course brings together all buildings, plumbing, mechanical, fuel gas, energy and electrical provisions for one- and two-family residences. Students will study the residential codes as they pertain to residential construction. (Degree Credit)

**CSTR 042 F Residential Steel Frame Construction 4 Units**

54 hours lecture and 54 hours lab per term. This is a comprehensive course that covers the fundamentals of utilizing light frame steel for residential and light commercial. Course emphasizes the safe use of hand and power tools, construction terminology, plan interpretation, and construction practices for foundation systems, and wall, ceiling, and roof framing. Field trips may be required outside of regularly-scheduled class time. (Degree Credit)

**CSTR 050 F Computer Design Software for the Contractor 2 Units**

27 hours lecture and 45 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using computer architectural design software to prepare students in the preparation of designs, blueprints, and material lists for the construction industry. Students will create programs that demonstrate features and functions using the architectural design software. (Degree Credit)

**CSTR 060 F Computer Estimating in Construction 3 Units**

36 hours lecture and 54 hours lab per term. This course provides the student with instruction in the concepts and practices with using computer estimating software for construction estimator positions within the construction industry. Students will process programs that demonstrate features and functions of the estimating software. Knowledge and understanding of blueprint reading is beneficial. (Degree Credit)

**CSTR 065 F Construction Project Scheduling 3 Units**

36 hours lecture and 54 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using project scheduling software currently used in the construction industry. Students will learn the practical application practices and demonstrate their ability to use the software and concepts associated with construction scheduling. Field trips may be required outside of regularly-scheduled class time. (Degree Credit)

**CSTR 100 F Residential Construction 4 Units**

54 hours lecture and 54 hours lab per term. This course emphasizes the safe use of hand and power tools, construction terminology, plan interpretation and construction practices in: ground work, foundation systems, wall framing, ceiling framing, roof framing, and roofing materials. Field trips may be required outside of regularly-scheduled class time. (CSU) (Degree Credit)



**CSTR 102 F Residential Finish Carpentry 4 Units**

54 hours lecture and 54 hours lab per term. This course covers units of instruction to include tool usage and safety, terminology, drywall installation and finishing, setting of door frames and hanging doors, installation of casing and base, finish hardware, paneling, railings, stairs, and trim/detail. Field trips may be required outside of regularly-scheduled class time. (CSU) (Degree Credit)

**CSTR 104 F Concrete and Masonry 3 Units**

45 hours lecture and 27 hours lab per term. This is a basic concrete construction course which includes use of concrete and masonry tools and forming, placing, finishing, and testing concrete. Field trips may be required outside of regularly-scheduled class time. (CSU) (Degree Credit)

**CSTR 108 F Surveying for Builders 2 Units**

18 hours lecture and 54 hours lab per term. This is a course for builders and contractors, both general and sub. It includes surveying instruments, surveying practice for construction limited to plot layouts, simple topography as on hillside lots, establishing grade points, using bench marks and other references. Basic applied trigonometry will be reviewed. (CSU) (Degree Credit)

**CSTR 110 F Residential Estimating 3 Units**

54 hours lecture per term. This course stresses residential blueprint reading, estimating, and material listing. Includes site preparation, foundations, framing, exterior finish, interior finish, roofing, hardware, and various specialty trade subcontracts. (CSU) (Degree Credit)

**CSTR 112 F Construction Materials, Specifications and Purchasing 2 Units**

36 hours lecture per term. This course covers the study of building materials as used in modern building construction and how they are represented in working drawings and specifications. (CSU) (Degree Credit)

**CSTR 116 F Residential Construction Practice I 4 Units**

**Prerequisite(s):** CSTR 100 F with a grade of C or better.

36 hours lecture and 108 hours lab per term. This course provides actual practice in the construction of a house project. Course emphasizes the correct and safe use of tools, rough framing problems, rough electrical, rough plumbing, mechanical systems, roofing, flashing, and exterior finish. (CSU) (Degree Credit)

**CSTR 118 F Residential Construction Practice II 4 Units**

**Prerequisite(s):** CSTR 102 F and CSTR 116 F, with a grade of C or better

36 hours lecture and 108 hours lab per term. This course provides actual practice in the finish work of the house project. Course work includes insulating, drywalling, door installation, finish hardware, finish plumbing, finish electrical, finish trim, painting, and any finishing processes that are deemed necessary to complete a house project. (CSU) (Degree Credit)

## Cosmetology (COSM)

**COSM 041 F Esthetician: Level 1 11 Units**

**Prerequisite(s):** 10th grade education or equivalent.

**Advisory:** Must be 17 years of age when applying for State Board Examination.

135 hours lecture and 198 hours lab per term. This course includes basic skin care procedures and techniques; analysis of the skin; facial treatments (manual, electrical and chemical); facial massage manipulations; temporary hair removal (tweezing and waxing); makeup techniques and applications; health, safety and sanitation precautions and procedures; bacteriology, chemistry, electricity, anatomy and physiology; professional ethics, hygiene, personality development, personal and professional management. Related subjects, as they are applicable to esthetics, are covered. This course is designed for preparation of the California Board of Barbering and Cosmetology Examination, and a successful career as an esthetician. This is the first of two consecutive segments. Pivot Point Member School (Degree Credit)

**COSM 042 F Esthetician: Level 2 11 Units**

**Prerequisite(s):** COSM 041 F with a grade of C or better.

**Advisory:** Must be 17 years of age when applying for State Board Examination.

135 hours lecture and 198 hours lab per term. This course includes an advanced study of skin care procedures and techniques; analysis of the skin; facial treatments (manual, electrical and chemical); facial massage manipulations (European, lymphatic and acupressure); temporary hair removal (tweezing, depilatories and waxing); make-up techniques and applications; hygiene, health, safety and sanitation precautions and procedures; chemistry, electricity; professional ethics, growth and personality development; personal, professional and business management; advanced topics and procedures (aromatherapy, spa treatments, chemical exfoliation). Related subjects, as they are applicable to esthetics are covered. This course is designed for preparation for the California Board of Barbering and Cosmetology Examination, and a successful career as an esthetician. This is the second of two consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 043 F Advanced Topics in Esthetics 0.5-3 Units**

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better or valid Esthetician or Cosmetology license.

**Advisory:** Completed 10th grade level or its equivalent

54 hours lecture and 162 hours lab per term. This course is designed to meet the needs of the Esthetician industry that requires advanced training, continuing education, and provide professional growth for licensed estheticians and cosmetologists. The course will be offered in modules of advanced topics. Unit credit may range from .5-3 units per module. Consult the class schedule to verify specific topic areas and credit offered for each topic and fees. Pivot Point Member School. (Degree Credit)

**COSM 046 F Advanced Makeup - Microdermabrasion 4 Units**

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better or a valid Esthetician or Cosmetology License.

**Advisory:** Completed 10th grade or equivalent.

36 hours lecture and 108 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education, and provide professional growth for licensed estheticians and cosmetologists. This course will be offered in two modules. Module One will cover advanced makeup and Module Two will cover Microdermabrasion. Consult the class schedule to verify specific topic areas; credit offered for each topic and fees. Pivot Point Member School.

**COSM 047 F Advanced Exfoliation-Microdermabrasion 2 Units**

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better, or a valid Esthetician or Cosmetology license.

**Advisory:** Completed 10th grade or equivalent

18 hours lecture and 54 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education and professional growth for licensed estheticians and cosmetologists. This module will cover advanced exfoliation using microdermabrasion techniques. Consult the class schedule to verify specific class meeting dates, credit offered and fees. Pivot Point Member School.

**COSM 048 F Advanced Makeup - Air Brush 2 Units**

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better or a valid Esthetician or Cosmetology license.

**Advisory:** Completed 10th grade or equivalent.

18 hours lecture and 54 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education, and provides professional growth for licensed estheticians and cosmetologists. This module will cover advanced makeup-air brush techniques. Consult the class schedule to verify specific class meeting dates, credit offered and fees. Pivot Point Member School.

**COSM 055AF Cosmetology - Level 1 11 Units**

**Prerequisite(s):** 10th grade education or equivalent.

**Advisory:** Must be 17 years of age when applying for State Board Examination. Authorized or required by statute or regulation or licensing agency.

Authorized or required by statute or regulation or licensing agency. 135 hours lecture and 207 hours lab per term. This course includes basic hair styling, manicures, facials, day make-up, permanent waving, scalp treatments, hair cutting, tinting, and bleaching. Subjects applicable to cosmetology are also covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology exam and a successful career as a cosmetologist. This is the first of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 055BF Cosmetology - Level 2 11 Units**

**Prerequisite(s):** COSM 055AF with a grade of C or better

**Advisory:** Must be 17 years of age when applying for State Board Exam

135 hours lecture and 207 hours lab per term. This course is designed to meet the needs of the Level 2 segment that requires basic hairstyling, manicuring, pedicuring, acrylic nails with form, nail wraps, tips, mends/repairs, facials, make-up, permanent waving, scalp treatments, hair cutting, tinting, bleaching, soft permanent wave, and sodium hydroxide chemical relaxing. Related subjects, as they are applicable to cosmetology are covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology Examination and a successful career as a cosmetologist. This is the second of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 055CF Cosmetology - Level 3 10 Units**

**Prerequisite(s):** COSM 055BF with a grade of C or better.

99 hours lecture and 243 hours lab per term. This course is designed to include hair design, manicuring and pedicuring, acrylic nails, nail repair, facials and corrective make-up, scalp and hair treatments, hair sculpture, hair color design, chemical texturizing, permanent waving, chemical relaxing and curl reformation. Related subjects, as they are applicable to cosmetology, are covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology State Exam and a successful career as a cosmetologist. This is the third of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 055DF Cosmetology - Level 4 9 Units**

**Prerequisite(s):** COSM 055CF with a grade of C or better

72 hours lecture and 288 hours lab per term. This course is designed to prepare students for advanced hair, artificial nails, facials, make-up, airbrush make-up, chemical texturing, hair sculpting, extensions, color design texture/chemical relaxing. Related subjects are covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology Exam and a successful career as a cosmetologist. This is the fourth of five consecutive segments. Pivot Point Member School (Degree Credit)

**COSM 055EF Cosmetology - Level 5 9 Units**

**Prerequisite(s):** COSM 055DF with a grade of C or better

**Advisory:** Must be 17 years of age when applying for State Board Exam.

72 hours lecture and 288 hours of lab per term. This course includes salon thermal hair curling, salon hair sculpting, permanent wave design, salon color design, salon chemical relaxing-sodium hydroxide, salon nail sculpture, and salon facials. Related subjects, as they are applicable to advanced Cosmetology salon techniques are covered in this course. This course also includes California Board of Barbering and Cosmetology mock written and performance exams. This program is designed toward preparation for the State Board Exam and a successful career as a cosmetologist. Nine (9) units are given for 320 hours of classwork completed with a C or better average. This is the fifth of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 060 F Instructional Techniques in Cosmetology, Barbering and Esthetician 3 Units**

**Prerequisite(s):** Valid California Cosmetology, Barbering, or Esthetician License and a minimum of three years experience as a cosmetologist, barber, or esthetician with one year completed within the previous two years.

**Advisory:** Concurrent enrollment in COSM 060LF.

36 hours lecture and 54 hours lab per term. This course is designed for licensed cosmetologist/barber/esthetician who intend to teach in the post-secondary or private sector cosmetology/barbering/esthetician schools. Students will learn teaching methodologies, professional development, and learning philosophies associated with becoming a master educator in cosmetology, barbering, or esthetics. Pivot Point terminologies, principles, concepts, practices in problem-solving are emphasized. Pivot Point Member School. \*Note: COSM 060 F and COSM 062 F include the opportunity for students to complete 600 required clock hours of laboratory observation as a student-instructor. Students will need to enroll in COSM 060LF, COSM 061LF, and COSM 062LF and immediately meet with lab instructor to arrange a weekly schedule in each level to complete the 600 clock hours and units required.

**COSM 060LF Instructional Techniques in Cosmetology, Barbering and Esthetician Laboratory 3 Units**

**Prerequisite(s):** Valid California Cosmetology, Barbering or Esthetician License and a minimum of three years experience as a cosmetologist, barber or esthetician with one year completed within the previous two years.

**Advisory:** Concurrent enrollment in COSM 060 F.

162 arranged hours lab per term. This course is designed to provide licensed cosmetologist/barber/esthetician with the opportunity to complete 600 required clock hours of lab observation as a student-instructor. Pivot Point Member School. (Degree Credit)

- COSM 061AF Pivot Point Instruction I** **3 Units**  
**Prerequisite(s):** COSM 060 F or COSM 060LF with a grade of C or better and a valid Cosmetology license.  
 36 hours lecture and 54 hours lab per term. This course is designed for Cosmetologists, Cosmetology Instructors/Instructor Trainees that need to know and teach Pivot Point techniques to obtain employment in most Community College's Cosmetology Departments and progressive salons or private schools. (Degree Credit)
- COSM 061BF Pivot Point Instruction II** **3 Units**  
**Prerequisite(s):** COSM 061AF with a grade of C or better and a valid California cosmetology or esthetician license in good standing.  
 36 hours lecture and 54 hours lab per term. This course is designed to restate the common terminology and principles of Pivot Point and differentiate terms, concepts, and principles. This course will demonstrate the formulation and application of all advanced techniques. Pivot Point Member School. (Degree Credit)
- COSM 061CF Pivot Point Instruction III** **3 Units**  
**Prerequisite(s):** COSM 061BF with a grade of C or better and a current cosmetology/esthetician license.  
 36 hours lecture and 54 hours lab per term. This course is specially designed for cosmetologists, estheticians, instructors and instructor trainees that need to know and teach Pivot Point techniques. This advanced course prepares the student to successfully complete the knowledge necessary in Pivot Point training and instructional techniques to advance a technical career in the private sector and community college instructors. Pivot Point Member School. (Degree Credit)
- COSM 061LF Intermediate Instructional Techniques in Cosmetology, Barbering and Esthetician Laboratory** **2 Units**  
**Prerequisite(s):** COSM 060LF with a grade of C or better and a valid Cosmetology, Barbering, or Esthetician License.  
**Advisory:** Concurrent enrollment in COSM 062 F.  
 108 arranged hours lab per term. This intermediate course is designed to provide licensed cosmetologist, barber, or esthetician with the opportunity to complete 600 required clock hours of lab observation as a student-instructor. Pivot Point Member School. (Degree Credit)
- COSM 062 F Advanced Instructional Techniques in Cosmetology, Barbering and Esthetician** **3 Units**  
**Prerequisite(s):** COSM 060 F with a grade of C or better and a valid Cosmetology, Barber, or Esthetician license.  
**Advisory:** Concurrent enrollment in COSM 061LF or COSM 062LF.  
 36 hours lecture and 54 hours lab per term. This course is designed to teach licensed cosmetologist, barber or esthetician advanced instructional techniques. The student instructor will learn to create advanced lesson plans, demonstrate stress management skills, and motivational skills, identify instructional aids, understand the importance of administrative tasks, and analyze and employ advanced instructional techniques. Pivot Point Member School.
- COSM 062LF Advanced Instructional Techniques in Cosmetology, Barbering, and Esthetician Laboratory** **3 Units**  
**Prerequisite(s):** COSM 060LF with a grade of C or better and a valid Cosmetology, Barbering or Esthetician License.  
**Advisory:** Concurrent enrollment in COSM 062 F.  
 162 arranged hours lab per term. This advanced course is designed to provide licensed cosmetologists, barbers and estheticians with the opportunity to complete 600 required clock hours of lab observation as a student-instructor. Pivot Point Member School. (Degree Credit)
- COSM 080 F Barbering: Cosmetology Crossover to Barbering** **7.5 Units**  
**Prerequisite(s):** COSM 055EF or Pass in completion of 1600 hours of Cosmetology in theory hours and practical operations with proof of training/certificate at an accredited California community college/post-secondary school approved by the California Board of Barbering and Cosmetology, or a valid California Cosmetology License issued from the California Department of Consumer Affairs.  
**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license exam.  
 100 hours lecture and 112 hours lab per term. This course provides the additional hours in shaving preparation and performance required to qualify for the examination for a license as a barber to practice barbering.
- COSM 081 F Barbering: Level 1** **9.5 Units**  
**Prerequisite(s):** 10th grade education or equivalent.  
**Advisory:** Must be 17 years of age when applying for the California Board of Barbering and Cosmetology barbering license examination.  
 108 hours lecture and 212 hours lab per term. This is the first of five consecutive segments. This course includes basic shaving, hair styling, facials, permanent waving, scalp treatments, hair cutting, tinting, and bleaching. Subjects applicable to b barbering are also covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.
- COSM 082 F Barbering: Level 2** **9.5 Units**  
**Prerequisite(s):** COSM 081 F with a grade of C or better.  
**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.  
 108 hours lecture and 212 hours lab per term. This is the second of five consecutive segments. This course requires basic shaving, hair styling, facials, permanent waving, scalp treatments, hair cutting, tinting, bleaching, soft permanent wave, ammonium thioglycolate and sodium hydroxide chemical relaxing. Related subjects, as they are applicable to barbering are covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.
- COSM 083 F Barbering: Level 3** **9 Units**  
**Prerequisite(s):** COSM 082 F with a grade of C or better.  
**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.  
 90 hours lecture and 230 hours lab per term. This is the third of five consecutive segments. This course is designed to include shaving, hair styling, facials, permanent waving, scalp treatments, hair cutting, tinting, bleaching, soft permanent wave, ammonium thioglycolate and sodium hydroxide chemical relaxing. Related subjects, as they are applicable to barbering are covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.

**COSM 084 F Barbering: Level 4****8.5 Units****Prerequisite(s):** COSM 083 F with a grade of C or better.**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.

72 hours lecture and 248 hours lab per term. This is the fourth of five consecutive segments. This course is designed to prepare students for advanced shaving, hair styling, facials, permanent waving, hair cutting, hair coloring, chemical relaxing, and hair replacement. Related subjects are covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.

**COSM 085 F Barbering: Level 5****8.5 Units****Prerequisite(s):** COSM 084 F with a grade of C or better.**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.

72 hours lecture and 248 hours lab per term. This is the fifth of five consecutive segments. This course includes barbershop shaving, hair styling, hair cutting, permanent waving, hair coloring, chemical relaxing, facials, and hair replacement. Related subjects, as they are applicable to advanced Barbering shop techniques are covered in this course. This course also includes California Board of Barbering and Cosmetology mock written and performance examinations. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better average.

## Counseling and Guidance (COUN)

**COUN 071 F Adaptive Computer Access****0.5-2 Units****Advisory:** Actively participate in the Disability Support Services (DSS) intake process with a DSS counselor

27-90 hours lecture and/or lab per term. This course is designed for students with learning, visual, physical, communicative disabilities or acquired brain injuries. Students will receive guided instruction/application in the introduction and use of computers and adaptive computer access technologies within the context of word processing. Pass/No Pass only. Open Entry/Open Exit.

**COUN 072 F Learning Assessment****0.5 Units****Advisory:** Eligibility for services from Disability Support Services

9 hours lecture per term. This course is an individualized intensive diagnostic learning assessment for students referred to Disability Support Services. Emphasis is placed on determining the learning strengths and weaknesses of these students. Through the assessment process, students will develop learning strategies, study skills and educational goals to help them improve basic skills, educational planning, and academic performance. A student educational contract (SEC) outlining long-term goals/short-term objectives for identified eligible students with learning disabilities will be developed. This is an open entry/open exit course with arranged hours. Pass/No Pass only. Open Entry/Open Exit

**COUN 075 F Adaptive Computer Access - Learning Strategies****0.5-2 Units****Advisory:** Actively participate in the Disability Support Services (DSS)

intake process with a DSS counselor

27-90 hours lecture and/or lab per term. This course is designed to help all students with disabilities identify their educational weaknesses and develop strategies to overcome and/or mitigate their limitations and weaknesses. Students will receive computer-assisted instruction to improve learning strategies, problem solving and cognitive skills and proficiency in basic skills areas. Pass/No Pass only. Open Entry/Open Exit.

**COUN 100 F Orientation for College Success****1 Unit**

18 hours lecture per term. This course is recommended for all incoming college freshman and satisfies the California Community Colleges matriculation requirements of assessment, orientation and counseling. This course is designed to familiarize students with college and contains an introduction to the principles of student development theory, student conduct, academic procedures, college policies, goal setting, educational and career planning, and college and student support services. Students will learn academic options in higher education and develop a tentative educational plan to achieve personal and academic goals. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units)

**COUN 101 F The College Experience****2 Units**

36 hours lecture per term. This course will facilitate an understanding of the issues involved in having a successful college experience. The emphasis includes four major components of study: self-exploration, development of academic and survival skills, awareness of higher education, and transfer exploration and vocational options. Topics will include: student development theory, purpose for attending college, maintaining health, development of positive self-esteem, strategies for living a balanced life, and acquisition of academic and survival skills. Students will develop knowledge of college resources, policies and procedures. (Degree Credit) (CSU)

**COUN 110 F Teaching As A Career****3 Units**

54 hours lecture per term. This course provides an introduction to the field of education and the teaching profession. Students will develop personal knowledge and understanding of the competing purpose and values of schools in society, the nature of teaching and the teaching profession, the impact of local, state, and federal government policies on schools, and contemporary educational values. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units)

**COUN 135 F Introduction to Leadership Development****3 Units**

54 hours lecture per term. This course is designed to provide emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills for application in multiple roles throughout their lifetime. Students will learn the role that communication, motivation, delegation, self-assessment, planning, time management, stress management, evaluation and governance play in developing successful leaders, working relationships, and organizations. Focus will include parliamentary procedure, program development, stress reduction, and time management. (Degree Credit) (CSU) AA GE, CSU GE

**COUN 140 F Educational Planning****0.5 Units**

9 hours lecture per term. This course includes: an orientation to college life, responsibilities, requirements, and regulations; an overview of the assessment process; certificates, occupational degrees, and transfer degrees; the transfer process; career guidance for selection of a major plan of study. Students taking this course will receive an overview of graduation requirements, transfer requirements, campus policies, student services, and career planning. Strongly recommended for first-time students with declared majors or enrollment in specific programs. Course sections may be designated for specific majors or programs. Pass/No Pass only. (Degree Credit) (CSU)

- COUN 141 F Career Exploration** **1 Unit**  
18 hours lecture per term. This course is designed to introduce students to a career decision-making process which includes both evaluation of the self and exploration of the world of work. Self-evaluation activities include identification of personality/temperament, interests, skills, goals and values. Career research activities are utilized to examine the world at work. The focus of the course is on self-description in relation to the choice of occupation and career. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)
- COUN 143 F Creative Job Search** **1 Unit**  
18 hours lecture per term. This course will cover the basic practical aspects of conducting a successful job search. The focus will be on application, cover letter, resume, and interview as well as labor market research. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)
- COUN 144 F Career Motivation and Self Confidence** **1 Unit**  
18 hours lecture per term. This course is designed to help students identify individual differences, examine personal characteristics and behavior, and evaluate self-concept. Students will interpret information and apply knowledge of self as related to career demands and opportunities with increased motivation and self-confidence. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)
- COUN 148 F Human Potential** **1 Unit**  
18 hours lecture per term. This course will help students to understand and enhance their self-concept through an exploration of how that self-concept directs behavior patterns. This course will also enable students to examine and assess their strengths and potential, values and decision-making skills in order to develop an improved self-concept, and improve communication and listening skills. By becoming aware of their individual potential, students can plan and achieve their educational goals. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)
- COUN 151 F Career and College Success (formerly Career/Life Planning)** **3 Units**  
54 hours lecture per term. This course is designed to teach strategies for success to promote academic and lifelong learning through the integration of career and academic planning. Topics include intensive career investigation, assessment of interest, personality, skills, values, and other personal qualities that coincide with educational and career success; application of career and lifespan development theory; psychological and social issues that impact career and life choices; decision making; time management; goal setting; learning and life management strategies; job search and career building techniques. This course emphasizes empowering students to take charge of their academic, career, and personal decisions through the integration of career exploration and individual educational planning. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units) AA GE, CSU GE
- COUN 152 F Diversity in the World of Work** **3 Units**  
54 hours lecture per term. This course explores the influence of factors such as gender, age, abilities, ethnicity, culture, and socioeconomic status on past, present and future working conditions, career development, and labor market trends in the United States. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) AA GE
- COUN 160 F Academic Success (formerly COUN 060 F)** **2 Units**  
36 hours lecture per term. This course is designed to promote student success. Students taking this course will receive an overview of graduation requirements, certificates, transfer requirements, campus policies, student services, and career planning and college culture. Focus will be on strategies needed for academic success and the development of a Comprehensive Educational Plan. Students will develop skills in time management, decision making, study techniques and learning strategies. Students will increase their awareness of community resources, current college policies and procedures and cultural diversity. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units)
- COUN 161 F Assertion Skills/Communication** **2 Units**  
36 hours lecture per term. This course introduces students to the concept of assertive skills and learning techniques and strategies for implementing assertive behavior. This course assists students in developing effective critical thinking skills as they explore the relationship between inner dialogue and outward behavior and analyze and assess conflicts encountered in everyday life. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)
- COUN 163 F Personal Growth and Life Success** **3 Units**  
54 hours lecture per term. This course will emphasize college student strategies through critical analysis of the academic, career, and interpersonal factors that influence student success. Students will examine the perception of the importance of a college education as it pertains to career trends, core values, and access to educational opportunities. Multidisciplinary examination will be applied to concepts of diversity, identity, life transitions, and individual adjustment; these concepts will then be related to choice theory and personal responsibility in educational success. Experiential and theoretical approaches will be applied to understanding the self, peer and campus culture, goal clarification and educational pathways. The course integrates the intellectual, physiological, social, and psychological aspects of being a college student through the comprehensive examination of personality development and life determinants. The critical analysis and synthesis of these aspects facilitates educational planning for transfer and career options. Students will be introduced to lifestyle choices and decision-making skills that validate their academic and career success. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units) AA GE, CSU GE
- COUN 193 F Financial Life Skills (formerly COUN 093 F)** **2 Units**  
36 hours lecture per term. This course is designed to assist students in understanding basic strategies for managing college and personal finances. Students will increase their knowledge in accessing available forms of financial assistance and maximizing finances for timely degree completion and/or transfer. Students will develop a basic understanding of adult-related tasks such as personal budget management, calculating cost of education, how to deal with financial difficulties, maximizing their financial aid benefits and other financial resources, understanding repayment options and the consequences related to mismanaging funds. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)
- COUN 199 F Counseling/Guidance: Independent Study** **0.5-2 Units**  
9-36 hours lecture per term. This course is designed for students who wish to explore in depth various guidance-related topics. Unit credit may range from one-half to two units in any given semester. Consult class schedule for list of topics and to verify credit for the particular term. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC review required.)

## Dance (DANC)

### DANC 100 F Dance Appreciation

3 Units

54 hours lecture per term. This course provides exposure to historical and contemporary dance forms and their religious, social, cultural and artistic qualities. The course will include the viewing of video documentation, discussion, research and student presentations. This course is recommended for non-majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

### DANC 101 F Introduction to Dance World Cultures

1 Unit

54 hours lab per term. This course will introduce social, folk, and square dancing from the different cultures of the world. Dance cultures that will be studied will include the dances of: Asia, Africa, Europe, Latin America, Middle East, Mexico, Native American, Polynesia, and Spain. This class will include research and study of the backgrounds of dances and cultures, and will provide opportunities for development of acceptable performance as preparation for more advanced technique courses. (CSU) (UC) (Degree Credit) AA GE, CSU GE

### DANC 102 F Conditioning for Dance

2 Units

18 hours lecture and 54 hours lab per term. This course introduces various types of stretching, strengthening, and body alignment exercises for dance. This course combines techniques and skills from various body therapy programs (e.g., yoga, Pilates, and Gyrokinesis) to enhance flexibility and strength. (CSU) (UC) (Degree Credit) CSU GE

### DANC 103 F Dance Technique I

1 Unit

54 hours lab per term. This course focuses on basic movement techniques to prepare the body for dance. This class also meets the needs of students who are interested in achieving fitness and contouring of the body by the use of dance technique. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

### DANC 104 F Dance Technique II

1 Unit

**Prerequisite(s):** DANC 103 F with a grade of C or better or instructor approval.

54 hours lab per term. This course provides intermediate movement techniques. This course also meets the needs of students who are interested in achieving fitness and contouring of the body by the use of dance technique. (Degree Credit) (CSU) (UC Credit Limitation) CSU GE

### DANC 110 F Ballet Folklorico

1 Unit

36 hours lab per term. This course is designed to give a general knowledge of the regional dance styles of Mexico and their cultural aspects. Students will be expected to learn various dance steps. (CSU) (UC) (Degree Credit)

### DANC 111 F Jazz I

1 Unit

54 hours lab per term. This course is designed for students to learn basic skills of Jazz Dance with emphasis on body alignment, strength and coordination. AA Dance; Liberal Arts; satisfies PE requirement for General Education. (CSU) (UC) (Degree Credit) AA GE, CSU GE

### DANC 112 F Jazz II

2 Units

**Prerequisite(s):** DANC 111 F with a grade of C or better.

18 hours lecture and 54 hours lab per term. In this course, students will learn intermediate skills of jazz dance with emphasis on body alignment, strength and coordination. This course includes more advanced work in turns, isolations, and combinations and work with more complex rhythmic elements. (CSU) (UC) (Degree Credit)

### DANC 113 F Tap Dance I

1 Unit

54 hours lab per term. This course is designed to introduce basic tap dance techniques and beginning tap dances and provides an opportunity for the enrolled student to develop increased coordination and rhythm. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

### DANC 114 F Tap Dance II

1 Unit

**Prerequisite(s):** DANC 113 F with a grade of C or better

54 hours lab per term. This course provides opportunity for further development of tap dance skills at an intermediate level. Includes some provision for student composition. (CSU) (UC) (Degree Credit)

### DANC 115 F Hip Hop Dance I

1 Unit

54 hours lab per term. This course provides the opportunity for students to learn various forms of beginning Hip Hop dancing including Popping, Locking and Funk style. Students will learn the basic history of hip hop culture. (CSU) (UC) (Degree Credit) CSU GE

### DANC 116 F Social Dance

1 Unit

54 hours lab per term. This course provides the enrolled student exposure to various dance forms. This course is designed for both the non-dancer and the student with dance experience. Examples of dance forms that may be included are: Swing, Salsa, Mambo, Cha-cha, Tango, Waltz, Country Western, and Fox Trot. Also included are historical roots of each form and opportunity for student choreography. (CSU) (UC) (Degree Credit) CSU GE

### DANC 119 F Dance for Theatre

1 Unit

54 hours lab per term. This course provides opportunities to explore various dance styles: ballet, jazz, modern and tap for musical theatre productions. Exposure to choreography for musical theatre and student choreography. (CSU) (UC) (Degree Credit) CSU GE

### DANC 120 F Dance History

3 Units

54 hours lecture per term. In this course, students will study dance forms from primitive to present day with lecture, film, and class discussion. Students will also compare various dance techniques, theories, and personalities who have contributed to the art of dance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

### DANC 121 F Classical Dance Fundamentals

1 Unit

54 hours lab per term. This course is designed for the student who has little or no training in classical dance. This course provides instruction in application of the use of the fundamentals of applied biomechanics to achieve classical dance positions and movements. It is designed to instruct the student in the use of the fundamentals of physical movement to achieve maximum physical performance for dance and to assist in preventing injury and creating longevity for the dancer. This course provides instruction in applied biomechanics at the ballet barre, for classical ballet positions, and in use of short sequences of dance combinations and basic turns and leaps for classical dance. (CSU) (UC) (Degree Credit) CSU GE

### DANC 122 F Middle Eastern Dance

1 Unit

54 hours lab per term. This course is designed to explore various types of dances that are common in the Middle East (Belly dancing and dabke). Students will acquire movement unique to Middle Eastern dance. (CSU) (UC Credit Limitation) (Degree Credit)

### DANC 130 F Afro-Caribbean Dance

1 Unit

54 hours lab per term. This course provides instruction in the dance styles and rhythms of Afro-Caribbean cultures. Different regions of the Caribbean will be explored. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

### DANC 132 F Flamenco Dance I

1 Unit

54 hours lab per term. In this course, students will study basic Flamenco Dance technique and learn movement combinations. This class provides students with the opportunity to develop coordination, rhythm, and performance skills. Some history of Flamenco will be included. (CSU) (UC Credit Limitation) (Degree Credit)

- DANC 140 F Introduction to Ballet** **2 Units**  
18 hours lecture and 54 hours lab per term. This course is designed to instruct the beginning ballet student in the fundamentals of ballet technique and terminology. Students will learn basic skills at the barre and center floor with an emphasis on proper alignment. The student will also learn the basic history of ballet as a performing art and will view examples of ballet. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 141 F Ballet I - Beginning Ballet** **2 Units**  
*Prerequisite(s):* DANC 140 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course students will elaborate on basic ballet skills, adding new vocabulary and movements. Emphasis will be on developing alignment, strength, flexibility, balance and coordination. Students will learn about the historical context of the art form and its roots in Western culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 142 F Ballet II - Advanced Beginning Ballet** **2 Units**  
*Prerequisite(s):* DANC 141 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course students will learn advanced beginning ballet technique with an emphasis on developing performance skills, self-expression and musicality. Students will practice increasingly complex connecting combinations that challenge body stability and control. Students will learn about the evolution of ballet in the twentieth century and its influence on other forms of dance. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 143 F Ballet III - Intermediate Ballet** **2 Units**  
*Prerequisite(s):* DANC 142 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course will challenge the student with intermediate level ballet steps and sequences. Emphasis will be on advancing technique for jumps and turns, performance skills, and self-expression. Students will use intermediate level steps and skills to compose short ballet sequences with attention on aesthetic choices. Students will explore different styles of contemporary ballet and significant contemporary ballet choreographers. (CSU) (UC) (Degree Credit) CSU GE
- DANC 150 F Commercial Dance** **1 Unit**  
54 hours lab per term. This course will focus on contemporary dance styles made popular from the television, film and video industry. Students will learn and create stylized commercial dance movement combinations using a variety of popular music. (CSU) (UC Credit Limitation) (Degree Credit)
- DANC 151 F Latin Jazz** **1 Unit**  
54 hours lab per term. In this course, students will study and learn basic skills of Latin Jazz dance and styles inherent in Jazz and Afro-Caribbean dance and Latin Popular rhythms such as Cha Cha, Mambo, Salsa, Merengue, Bolero, Cumbia, and Corridos. Students will learn Latin Jazz combinations. Cost of dance concert admission will not exceed \$40. (CSU) (UC) (Degree Credit)
- DANC 160 F Introduction to Modern Dance** **2 Units**  
18 hours lecture and 54 hours lab per term. This course is an introduction to modern dance. Students will learn the basic vocabulary and movements of modern dance with an emphasis on body and spatial awareness, alignment, locomotor skills, and conditioning the body. Students will also learn about the history of modern dance as a performing art and will view examples of modern dance in class. (CSU) (UC) AA GE, CSU GE
- DANC 161 F Beginning Modern Dance (formerly DANC 107 F)** **2 Units**  
*Prerequisite(s):* DANC 160 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course is designed to build on the basics of modern dance adding new vocabulary and movements. Emphasis will be on alignment, strength, flexibility, balance and coordination. Students will learn about the historical context of the art form and its roots in Western culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 162 F Advanced Beginning Modern Dance (formerly DANC 108 F)** **2 Units**  
*Prerequisite(s):* DANC 161 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course expands upon the foundations of modern dance technique with an emphasis on performance skills, self-expression, and musicality. Students will practice increasingly complex connecting combinations challenging kinesthetic abilities. Students will learn about the evolution of modern dance in the twentieth century and its roots in United States culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 163 F Intermediate Modern Dance** **2 Units**  
*Prerequisite(s):* DANC 162 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course will present intermediate level modern dance technique, challenging skills with increasingly complex movement patterns and physicality. Emphasis will be on developing creative skills and generating interpretive dance phrases. Students will learn about contemporary modern dance choreographers. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 200 F Dance Appreciation - A Classical Ballet Retrospective** **3 Units**  
54 hours lecture per term. This course is designed to expose the student to the performance of classical ballet by major dance companies from around the world and historical artists in performance. This course examines the thematic material of individual ballets, the era from which they came, the history of the choreographers, and the influences of society on ballet. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- DANC 202 F Dance Composition/Choreography** **3 Units**  
36 hours lecture and 54 hours lab per term. This course provides theory and practice of the basic elements of dance composition and also emphasizes problem-solving skills and the craft and creation of movement studies and full-length dances for the individual and/or group. (CSU) (UC) (Degree Credit) CSU GE
- DANC 203 F Dance Production** **2 Units**  
*Prerequisite(s):* Previous dance experience.  
108 hours lab per term. This course provides opportunity for creative dance expression. The emphasis of the class is on advanced dance techniques and choreography. Opportunities for public performance are available. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)
- DANC 204 F Dance Rehearsal and Performance** **3 Units**  
*Prerequisite(s):* Any previous dance class or instructor approval.  
This course provides an opportunity for a student to stage his own choreography or to participate as a dancer in original choreography by a student, faculty or guest artist. This course is a practical experience in choreography, performance and directing. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- DANC 205 F Dance Ensemble** **3 Units**  
*Prerequisite(s):* Audition.  
36 hours lecture and 54 hours lab per term. This course is a selective dance performing group utilizing advanced resource and movement materials. This class is designed to give the advanced dancer an opportunity for continued performance and growth in dance technique and group repertoire. Students participate in multiple performances on campus and/or venues within the area. This course includes preparing for an audition, designing a resume, and setting goals for future performance opportunities in dance. Field trips may be required. Course may be taken three times for credit. (CSU) (UC) (Degree Credit) CSU GE

**DANC 210 F Multicultural Dance in the U.S. Today** **3 Units**

54 hours lecture per term. This course covers the social and theatrical dances of various countries will be viewed and examined in terms of cultural influences, historical and social origins, and the functions they fulfill for individual artists, their cultures, and society in general. African American, Asian, Hispanic, European and Native American dances, choreographers, and dancers will be studied. The class work will include readings, discussions, group projects, and analysis of dance performances on video and live theater. Attendance at a selected group of performances is required. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

**DANC 214 F Dance Repertory** **2 Units**

108 hours lab per term. This course provides the opportunity to rehearse and perform works choreographed by faculty and/or artist-in-residence. It is an opportunity to experience professional working conditions and requirements. All phases of the dance concert process from audition to rehearsal to backstage preparation will be covered. (CSU) (UC) (Degree Credit)

## Digital Arts (DART)

**DART 100 F Introduction to Digital Art** **3 Units**

36 hours lecture and 54 hours lab per term. This course teaches the fundamentals of digital media to input, create, manipulate and output a variety of images. Students learn basic skills and use a varied selection of visual arts software, while gaining insights into the basic principles of digital computers and digital graphics. Extensive hands-on use of computers and other hardware allows students to build a portfolio and acquire the experience levels necessary to advance in this field. (CSU) (Degree Credit)

**DART 101 F Photoshop for Digital Arts** **3 Units**

36 hours and 54 hours lab per term. This course teaches the fundamentals of Adobe Photoshop to input, create, manipulate and output a variety of images. Students learn basic design skills and usage of the Adobe Photoshop, while gaining insights into the basic principles of digital manipulation and graphics. Extensive hands-on use of computers and other hardware allow students to build a portfolio and acquire the experience levels necessary to advance in this field. (CSU) (Degree Credit)

**DART 102 F Introduction to Web Graphics** **3 Units**

36 hours and 54 hours lab per term. This course is a study of page development, navigation, graphics, animation, video, and sounds media for use on the Internet. During the course of the semester, the student builds an assigned website and a personal website. This course is intended as a gateway to a web certificate. Students can pursue additional in-depth study on the topic(s) that most attracted them during the semester. (CSU) (Degree Credit)

**DART 103 F Practical Color Techniques for Digital Media** **2 Units**

**Prerequisite(s):** ART 118 F with a grade of C or better.

18 hours lecture and 54 hours lab per term. This course teaches the practical side of color theory concepts, from creating and outputting color images to using color-corrections to recreate the digital file. Students learn to apply their color knowledge using extensive hands-on, real-world examples, allowing students to acquire the experience levels necessary to advance in this field. (CSU) (Degree Credit)

**DART 104 F Introduction to Maya 3D** **3 Units**

**Advisory:** DART 100 F

36 hours lecture and 54 hours lab per term. This course will introduce the Autodesk Maya 3D computer software, focusing upon polygonal modeling techniques. Students will combine modeling techniques with critical thinking assignments to design models for the entertainment industry. Students will also focus on learning design fundamentals by creating thumbnails, and silhouette sketching to aid in their design solutions. (CSU) (Degree Credit)

**DART 105 F Fundamentals of Digital Media Design** **3 Units**

**Advisory:** DART 100 F

36 hours lecture and 54 hours lab per term. This course introduces basic digital design concepts in the development of solutions to design problems. Topics include the design theory, drawing, color theory, typography, illustration, animation, layout techniques, vocabulary, and knowledge of appropriate digital media output formats. Final output may integrate additional media such as animation, sound, text, and video. (CSU) (Degree Credit)

**DART 106 F Intermediate Maya** **3 Units**

**Prerequisite(s):** DART 104 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course gives the student an introduction to the intermediate use of Maya, a 3D digital program used within the entertainment/game industry to create 3D visual effects. Students will continue forward with basics learned in DART 104 F and expand their knowledge of modeling, texturing and lighting. Class assignments will cover more complex models, environments, and vehicle creations. Students will start building a portfolio of finished assignments that cover a wide range of the entertainment industry; for game design, animation and the film industry. (CSU) (Degree Credit)

**DART 107 F Digital Drawing** **3 Units**

**Advisory:** ART 182 F and DART 100 F.

36 hours lecture and 54 hours lab per term. This course encompasses the use of digital-based software applications combined with digital drawing tablets and touch sensitive digital monitors. This course also prepares the student to meet industry standards and requirements for working digitally inside entertainment art production companies. (CSU) (Degree Credit)

**DART 108 F Digital Drawing - Dynamic Sketching** **3 Units**

**Prerequisite(s):** DART 107 with a grade of C or better

**Advisory:** DART 100 F and ART 243 F and ART 182 F

36 hours lecture and 54 hours lab per term. This course is an accelerated digital drawing class applying in-depth acquisition of skill and technique demonstrated in digital drawing. This course covers essentials of draftsmanship combined with digital drawing applications Sketch Book Pro and Photoshop to conceptualize ideas from script. Emphasis on problem-solving skills, and abilities associated with designing from script, to finished conceptual sketch. Focus is on the design process of translating ideation to finished projects, developed sketching for animators, illustrators and entertainment game designers. (CSU) (Degree Credit)



- DART 109 F Environmental Sketching** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better  
*Advisory:* DART 107 F and ART 243 F  
 36 hours lecture and 54 hours lab per term. This course is an ideal foundation course for the art student wanting to learn sketching techniques used for creating and strengthening environmental sketching abilities. Foundation study will focus on designing while using perspective to create thumbnails and quick sketch visualizations. Students will be exposed to the steps required to take an idea from script, to thumbnail, to rough, to finished design. This is an ideal foundational class for the student wanting to pursue a career as a concept artist or digital painter inside entertainment. (CSU) (Degree Credit)
- DART 110 F Fundamentals of Character Design** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better  
*Advisory:* DART 107 F and DART 135 F and ART 243 F  
 36 hours lecture and 54 hours lab per term. This course will introduce the student to the basics of character design encompassing techniques and skills used within the creation of character development. Classroom exercises will focus on combining design principles, with perspective fundamentals to create characters for use within the fields of entertainment and commercial art. (CSU) (Degree Credit)
- DART 111 F Character Design** 3 Units  
*Prerequisite(s):* DART 110 F with a grade of C or better  
*Advisory:* DART 107 F and DART 135 F and ART 243 F.  
 36 hours lecture and 54 hours lab per term. This course is designed to move the student from the basics learned inside DART 110 F and introduce them to more complex character development encompassing the fields of animation and game design. (CSU) (Degree Credit)
- DART 112 F Vector Graphics** 3 Units  
*Advisory:* DART 100 F.  
 36 hours lecture and 54 hours lab per term. This is a course that encompasses a basic study of digital tools to make vector-based visual art intended for publication. This course involves extensive hands-on use of the computer to build a portfolio and acquire the experience levels demanded by employers and clients. (CSU) (Degree Credit)
- DART 115 F Introduction to Prop Design (formerly ART 090AF)** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better  
*Advisory:* ART 243 F and DART 107 F  
 36 hours lecture and 54 hours lab per term. This course will introduce the student to designing props. Props are objects that are used by a character during animation or gameplay. These objects consist of weaponry, vehicles, digital devices, military elements and portable objects. A prop designer is also responsible for incorporating the historical and mechanical significance of a show into the design process. Prop Design is an essential part of animation and game production, and is an entry-level position for students who want to start working in the entertainment industry. (CSU) (Degree Credit)
- DART 119 F Interior Sketching** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better  
*Advisory:* DART 107 F and DART 109 F and ART 243 F  
 36 hours lecture and 54 hours lab per term. This course is an ideal follow-up course to DART 109 F, focusing on sketching techniques used for creating and strengthening interior environment sketching abilities. Interior sketching is used in the pre-production and production phase of development for game/animation/film production focusing on scene development, background design and level design. Students are advised to have a solid background in either perspective, pictorial illustration, or exterior sketching before taking this course. (CSU) (Degree Credit)
- DART 120 F 3D Modeling** 3 Units  
*Prerequisite(s):* DART 104 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an intermediate modeling course focusing on more advanced 3D modeling assignments encompassing vehicle design, organic modeling, set development, and staging. The Autodesk Software application, Maya, will be used to demonstrate polygonal, nurb, and sub-division surface modeling techniques. (CSU) (Degree Credit)
- DART 121 F Futuristic Vehicle Design (formerly ACG 120 F)** 3 Units  
*Prerequisite(s):* DART 104 F with a grade of C or better  
*Advisory:* DART 106 F and DART 135 F and ART 182 F and ART 243 F  
 36 hours lecture and 54 hours lab per term. This is an intermediate modeling course focusing on specific techniques and design theories for designing futuristic vehicles. Students will work from a traditional conceptual approach of thumbnails and rough sketches to create a final design that can then be modeled in the Maya 3D software application. (CSU) (Degree Credit)
- DART 123 F Introduction to 3D Texturing** 3 Units  
*Prerequisite(s):* DART 100 F and DART 104 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an introduction course to 3D texturing using Adobe Photoshop and Allegorithmic's Substance Painter as the texturing software and Autodesk's Maya to preview and render images. The students will learn the terminology, research and digitally paint textures such as color, displacements, bumpiness and specularly, on 3D models used for animation, film, video games and consumer product. (CSU) (Degree Credit)
- DART 124 F 3D Texturing for Organic Characters** 3 Units  
*Prerequisite(s):* DART 104 F and DART 123 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an intermediate class on 3D texturing organic models using Allegorithmic's Substance Painter. The student will continue forward with 3D texturing use Substance Painter, focusing on expanded skills with set assignments, concentrating on texturing organic models. The students will learn how to create HDRI images for lighting, research and digitally recreate textures for humanoids and creatures used for animation, film, video games and consumer product. (CSU) (Degree Credit)
- DART 125 F 3D Texturing for Hard Surface Modeling** 3 Units  
*Prerequisite(s):* DART 104 F and DART 123 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an intermediate class on 3D texturing hard surface models using Allegorithmic's Substance Painter. The student will continue forward with 3D texturing using Substance Painter, focusing on expanded skills with set assignments, concentrating on texturing hard surface 3D model. The students will learn how to create HDRI images for lighting, research and digitally recreate textures for props and sets used for animation, film, video games and consumer product. (CSU) (Degree Credit)
- DART 132 F Digital Imaging I** 3 Units  
 36 hours lecture and 54 hours lab per term. This course instructs students to make and edit images using photo-editing and other raster graphics programs. Raster graphics is the technology of choice for continuous-tone artwork suitable for traditional print formats as well as newer electronic media such as web pages on the internet. Visually, raster images are often characterized by a photographic or painterly appearance. These programs are less appropriate for stylized, hard-edge material. This course covers leading photo-editing and manipulation software, with plenty of hands-on use of the computer to build a portfolio and acquire the experience levels demanded by employers and clients. (CSU) (Degree Credit)

**DART 133 F Marvelous Design I - Introduction to Cloth Simulation 3 Units**

36 hours lecture and 54 hours lab per term. This course is an introduction to cloth simulation using Marvelous Designer, one of the leading software used to create digital clothing simulations in the fashion, video game, engineering, science and entertainment industries that mimic the real-world properties of fabrics. Students learn to design and model digital clothing simulations using traditional pattern-making techniques such as sewing and stitching to acquire the experience levels necessary to advance in their chosen field. (CSU) (Degree Credit)

**DART 134 F Marvelous Designer II: Production Techniques 3 Units**

**Prerequisite(s):** DART 133 F with a grade of C or better.

36 hours lecture and 54 hours lab per term. This is an advanced level cloth simulation course using Marvelous Designer, one of the leading software in this field that mimics the real-world properties of fabrics. Students learn to design and model production-driven digital cloth simulations based on traditional pattern-making techniques such as sewing and stitching to acquire the experience levels necessary to advance in the fashion, video game, engineering, science and entertainment industries. (CSU) (Degree Credit)

**DART 135 F Introduction to Digital Painting 3 Units**

**Advisory:** ART 182 F and DART 100 F.

36 hours lecture and 54 hours lab per term. This course will introduce the student to the Photoshop software application, the most commonly used application for digital painting within the entertainment industry. This course will focus on digital painting techniques within the Photoshop software application, and how it applies towards creating digital artwork. (CSU) (Digital Credit)

**DART 136 F Intermediate Digital Painting 3 Units**

**Prerequisite(s):** DART 135 F with a grade of C or better

**Advisory:** DART 107 F and ART 243 F

36 hours lecture and 54 hours lab per term. This course continues forward painting with the Photoshop digital application focusing on expanded skill set assignments with emphasis on vehicle design, character creation and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)

**DART 137 F Advanced Digital Painting 3 Units**

**Prerequisite(s):** DART 136 F with a grade of C or better

**Advisory:** DART 107 F and DART 108 F and ART 243 F

36 hours lecture and 54 hours lab per term. This course is based upon increasing a mastery of digital painting technique using the Photoshop application to create vehicle design, character creation, and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)

**DART 138 F Digital Painting for Production 3 Units**

**Prerequisite(s):** DART 107 F pr DART 136 with a grade of C or better.

**Advisory:** ART 243 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to working and delivering production level artwork, adhering to industry standard in entertainment production. Students will be painting with the Photoshop digital application, focusing on advanced level assignments prepared by industry professionals. Assignments will focus upon MAYA digital render paint-overs, vehicle design, character creation, and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)

**DART 140 F Digital Publishing I 3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on the use of computers as a design aid to generate "camera ready" page layouts, integrating graphics and text. Emphasis is on design of the page, use of the computer programs, and printing skills required for a finished product. Open lab work may be required to complete assignments. (CSU) (Degree Credit).

**DART 146 F Digital Publishing II 3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on the use of advanced options of industry standard software as a design aid to generate "camera ready" page layouts. Emphasis is on developing experience in varied types and sizes of commercial projects. Open lab work may be required for completing assignments. (CSU) (Degree Credit)

**DART 148 F Introduction to Narrative Illustration 3 Units**

**Prerequisite(s):** ART 137 F or ART 182 F, with a grade of C or better.

**Advisory:** ART 243 F and DART 107 F and DART 135 F.

36 hours lecture and 54 hours lab per term. This course is designed to introduce the student to narrative illustration concepts incorporating traditional draftsmanship skill sets, combined with entertainment design skill sets, and digital software to produce narrative story illustrations for entertainment, animation, and storytelling careers. (CSU) (Degree Credit)

**DART 150 F 3D Computer Animation 3 Units**

**Prerequisite(s):** DART 104 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course is an intermediate study of the animation sub-menu tab in the Maya 3D software application. This course will focus on introducing the student to basics of 3D computer animation. The Maya software is commonly used within film, game and animation industries for creating animations, and special effects. (CSU) (Degree Credit)

**DART 151 F Introduction to Character Animation and Rigging 3 Units**

**Prerequisite(s):** DART 104 F and DART 150 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This is an introductory course in rigging and animation, focusing in the movement of characters in 3D space using Autodesk's Maya, the leading software in the entertainment industry. The student will learn how to implement rigs and execute animation of characters in a 3D environment, interpreting the 12 Principals of Animation in the performance of their character's movements. Final animation renders will integrate additional media such as sound, to be used in a variety of visual media, from films, television, consumer products to video games. (CSU) (Degree Credit)

**DART 152 F Pre Visual Animation (formerly ACG 150 F) 3 Units**

**Prerequisite(s):** DART 104 F and DART 150 F with a grade of C or better.

**Advisory:** ART 215 F

36 hours lecture and 54 hours lab per term. This course is an intermediate study in animation, focusing upon pre visual camera animation. Animating cameras and setting up scenes for pre visual animation requires an education in cinematography, story boarding, and timing. Pre visual animation has become a new position within the entertainment industry providing early solutions for games, movies, special effects, and television commercial productions. (CSU) (Degree Credit)

**DART 153 F Introduction to Digital Sculpting with ZBrush 3 Units**

**Advisory:** DART 100 F and DART 104 F

36 hours lecture and 54 hours lab per term. This is an introductory course in digital sculpting introducing the student to the Pixologic ZBrush 3D Digital Sculpting application. The ZBrush application can simulate traditional sculpting in clay to create high resolution digital sculpted models, and images for film, game, and animation productions. (CSU) (Degree Credit)

**DART 154 F Creature Sculpting with ZBrush****3 Units****Prerequisite(s):** DART 153 F with a grade of C or better**Advisory:** DART 100 F and DART 104 F.

36 hours lecture and 54 hours lab per term. This is an intermediate course in digital sculpting concentrating in Human and Creature Anatomy using Pixologic's ZBrush, a 3D digital sculpting software. ZBrush simulates traditional clay sculpting digitally, creating high-resolution models, which can then be rendered into images or models for the entertainment, consumer product and manufacturing industries. (CSU) (Degree Credit)

**DART 155 F Hard Surface Sculpting with ZBrush****3 Units****Prerequisite(s):** DART 153 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This is an intermediate course in digital sculpting concentrating in Hard Surface Digital Sculpting using Pixologic's ZBrush, a 3D Digital Sculpting application. ZBrush simulates traditional clay sculpting digitally, creating high-resolution models, which can then be rendered into images or models for the entertainment, consumer product and manufacturing industries. (CSU) (Degree Credit)

**DART 156 F 3D Printing Techniques with ZBrush****3 Units****Prerequisite(s):** DART 153 F with a grade of C or better.**Advisory:** DART 100 F and DART 104 F.

36 hours lecture and 54 hours lab per term. This is an intermediate course in digital sculpting concentrating in using Pixologic's ZBrush, a 3D Digital Sculpting application, for 3D printing. ZBrush simulates traditional clay sculpting digitally, creating high-resolution models, which can then be exported to all types of Additive Process 3D printers to generate physical models for the entertainment, consumer product and manufacturing industries. (CSU) (Degree Credit)

**DART 157 F Introduction to 3D Printing and Fabrication****3 Units**

36 hours lecture and 54 hours lab per term. In this course, students will explore the different additive manufacturing processes of 3D printing, from 3D digital file manipulations using Autodesk's MeshMixer, file slicing and output for the creation of physical models, their refinement and presentation using traditional methods to create a finish piece for the entertainment, consumer product, medical/biotech, automotive and manufacturing industries. (CSU) (Degree Credit)

**DART 158 F Fusion 360 I - Introduction to Product Design****3 Units**

36 hours lecture and 54 hours lab per term. This course introduces students to the basics of computer-aided design, engineering, and manufacturing using Fusion 360 to create product design for the entertainment, transportation, medical and manufacturing industries. From sketching, drafting, modeling, simulations, animation and rendering, the students learn Fusion 360 based on extensive real-world examples, allowing them to acquire the experience levels necessary to advance in their chosen fields. (CSU) (Degree Credit)

**DART 159 F Fusion 360 II: Product Design Production Techniques****3 Units****Prerequisite(s):** DART 158 F with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course introduces students to advanced product design and production techniques using Fusion 360 to create products for the entertainment, transportation, medical and manufacturing industries. From sketching, drafting, modeling, simulations, animation and rendering, the students learn advanced product design production techniques based on extensive real-world examples, allowing them to acquire the experience levels necessary to advance in their chosen fields. (CSU) (Degree Credit)

**DART 161 F Body Dynamic for Character Animation with Maya****3 Units****Prerequisite(s):** DART 150 F and DART 151 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This is an intermediate course in character rigging and animation, focusing in body dynamics. In this class, students will continue to implement the movement-mechanics of characters in 3D space, in order to explore more in depth the action of forces to the body, forces such as gravity and weight, which are the foundations of the 12 Principles of Animation. Final animation renders will integrate additional media such as lighting and texturing, to be used in a variety of visual media, from films, television, consumer products to video games. (CSU) (Degree Credit)

**DART 162 F 2D Computer Animation****3 Units**

36 hours lecture and 54 hours lab per term. This course is a study of digital tools to represent moving objects in 2D space. Students will learn how to create 2D computer animation. Final output may integrate additional media (sound, text, graphics, and video), and find distribution as CD-ROMs, webpages, complete websites, videos, cartoons, animated shorts, games, education, instructional training, and creative self-expression. (CSU) (Degree Credit)

**DART 164 F Interactive Multimedia Design****3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on designing interactive multimedia presentations by integrating a variety of programs and media (sound, text, graphics and video). Final output may take the form of DVDs, CD-ROMs, websites, videos, cartoons, animated shorts, games, educational software and creative self-expression. Open lab work may be required to complete assignments. (CSU) (Degree Credit)

**DART 170 F Digital Photo Editing I****3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on digital photography and the appropriate level usage of software for the manipulation of raster images for the development of fine art and photographic images appropriate for advertising design. Digital cameras, scanners, photo CDs, and video images provide the basis for image manipulation pushing to the extreme of digital photography. Course topics include camera selection, image enhancement, editing, compositing, retouching, photomontages, pre-press, color management, photo printing, color separations and service bureaus. (CSU) (Degree Credit)

**DART 171 F Facial Acting for Character Animation with Maya****3 Units****Prerequisite(s):** DART 151 F and DART 161 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course further develops the student's knowledge on the creation of rigs and animation-techniques for a character's acting, based on live-action recordings and the implementation of the 12 principles of Animation. The student will learn how to analyze video references, how to act, record and utilize their own footage as a guide for the rigging and animation of specific shops, concentrating on the acting of 3D characters in 3D environments to be used in a variety of visual media, from films, television, consumer products to video games. (CSU) (Degree Credit)

**DART 172 F Digital Image Editing II****3 Units****Advisory:** DART 170 F

36 hours lecture and 54 hours lab per term. This course focuses on getting a good digital image and editing digital imagery and the usage of software for the manipulation of raster images for the development of fine art and photographic images appropriate for advertising design and digital media and art. Digital cameras, scanners, photo CDs, and video images provide the basis for image manipulation pushing to the extreme of digital photography. Course topics include equipment choices, image enhancement, editing, compositing, retouching, photomontages, pre-press, color management, photo printing, color separations and service bureaus and methods of delivery. (CSU) (Degree Credit)

**DART 180 F Digital Video****3 Units**

36 hours lecture and 54 hours lab per term. This course is an examination of digital video editing techniques including the professional manipulation of sound and beginning motion graphics and compression techniques. This course includes the study and hands-on use of computers, assorted software, SDHC card-based digital video cameras, and other tools and techniques used for digitizing, editing and composition of video and audio sources. This course provides an in-depth exploration of digital video as used in the fields of multimedia, video/film, websites, DVD/Blu Ray disk creation, museum installations and video for cellular and mobile devices. (CSU) (Degree Credit)

**DART 181 F Advanced Digital Video****3 Units****Advisory:** DART 180 F

36 hours lecture and 54 hours lab per term. This course builds on the basic editing skills learned in DART 180 F. This course is an examination of intermediate to advanced digital video editing techniques including the professional manipulation of sound. Video distribution includes multimedia video, online and offline video editing, interactive video inclusive websites, DVD/Blu Ray disk creation, video for cellular and mobile devices. (CSU) (Degree Credit)

**DART 182 F Motion Graphics and Special Effects****3 Units**

**Advisory:** DART 180 F or two years experience with contemporary editing and compositing software or one year of professional industry experience in editing and/or motion graphics

36 hours lecture and 54 hours lab per term. This course builds on the basic editing skills learned in DART 180 F. This course is an introduction to motion graphics, digital composition, sound design and special effects for multimedia, 2D, 3D space digital video, installations and mobile devices. (CSU) (Degree Credit)

**DART 195 F Production Design for Entertainment - Eastern Civilizations****3 Units****Prerequisite(s):** DART 109 F with a grade of C or better**Advisory:** ART 243 F and DART 107 F and DART 135 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to environmental-production design techniques for entertainment focusing on the architectural development of Eastern civilizations, and their influence upon production-design for film, games, and animation. (CSU) (Degree Credit)

**DART 196 F Production Design for Entertainment: Western Civilizations****3 Units****Prerequisite(s):** DART 109 F with a grade of C or better**Advisory:** ART 243 F and DART 107 F and DART 135 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to environmental-production design techniques for entertainment focusing on the architectural development of Western civilizations, and their influence upon production design for film, games and animation. (CSU) (Degree Credit)

**DART 197 F Production Design for Entertainment - Early Science Fiction****3 Units****Prerequisite(s):** DART 109 F with a grade of C or better**Advisory:** ART 243 F and DART 107 F and DART 135 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to "environment-production" design techniques for entertainment focusing inside the history of early science fiction. Students will examine the historical architecture used within the development of the early science fiction genre relating towards film, games, and animation. (CSU) (Degree Credit)

**DART 198 F Production Design for Entertainment: Late Science Fiction****3 Units****Prerequisite(s):** DART 109 F with a grade of C or better**Advisory:** ART 243 F and DART 107 F and DART 135 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to "environment-production" design techniques for entertainment focusing inside the history of late science fiction. Students will examine the historical architecture used within the development of the late science fiction genre relating towards film, games, and animation. (CSU) (Degree Credit)

## Drafting Technology (DRAF)

**DRAF 101 F Blueprint Reading for Manufacturing (formerly DRAF 070 F)****2 Units**

36 hours lecture per term. This basic print reading course is designed to prepare Machine Tool, Welding, Engineering, and Metal Fabrication students to interpret drawings related to manufacturing. This course explains the importance of engineering drawings in the manufacturing environment. This course covers the basic elements of a blueprint and introduces the concepts to successfully interpret engineering drawings. This course covers the principles of shop sketching, basic review of shop mathematics, and use of common measuring tools. A study of dimensioning and drawing symbols will be included. (CSU) (Degree Credit)

**DRAF 140 F AutoCAD for Industry****3 Units****Advisory:** DRAF 171 F

45 hours lecture and 27 hours lab per term. This is a comprehensive introduction to AutoCAD designed for practicing drafters, engineers, and other manufacturing oriented persons. Topics include hardware requirements and operation, database management, terminology, 2D AutoCAD drawing commands, plotting, symbol libraries, and dimensioning commands. Field trips may be optional outside of regularly-scheduled class times. (CSU) (Degree Credit)

**DRAF 141 F Advanced CAD for Industry****3 Units**

**Prerequisite(s):** DRAF 140 F with a grade of C or better or previous experience.

45 hours lecture and 27 hours lab per term. This is an advanced course in computer aided design (CAD) using AutoCAD. Students will learn advanced industrial drafting concepts while strengthening their CAD skills. Emphasis will be on drafting and design areas such as fasteners, auxiliary view, isometric view, development layout, scaling and paperspace. A "2D" approach to AutoCAD will be used. (CSU) (Degree Credit)

**DRAF 143 F 3D Applications Using AutoCAD****3 Units****Prerequisite(s):** DRAF 140 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This course is designed for the experienced AutoCAD user who needs a working knowledge of AutoCAD's 3D environment. Topics will include an introduction to 3D applications, the 3D coordinate system, display control wire frame modeling, surface modeling, solids modeling, analysis of a solids model (mass properties), model rendering, hardcopy output, and 2D/3D transfer. This course will be taught with an emphasis on mechanical drafting applications. (CSU) (Degree Credit)

**DRAF 171 F Fundamentals of Drafting****2 Units**

18 hours lecture and 54 hours lab per term. This is a beginning drafting course that will introduce the proper use of drafting instruments, lettering, geometric construction, pictorial drawings, orthographic projection, dimensions, single-auxiliary views and sections. Emphasis is placed on line quality and lettering as well as some problems drawn from the industrial field. (CSU) (Degree Credit)

**DRAF 173 F Geometric Dimensioning and Tolerancing 2 Units****Advisory:** DRAF 101 F.

36 hours lecture per term. This is an introductory course in the application and interpretation of geometric dimensioning and tolerancing concepts per the latest revision of the American Society of Mechanical Engineers (ASME) standard #Y14.5-2018. This course is designed for persons working in the fields of drafting, machining, manufacturing and quality control. (Degree Credit) (CSU)

**DRAF 944 F Solidworks 3 Units**

45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concept, practice, and development of feature based solid modeling using popular solid modeling software. Students will demonstrate the features of the software by creating parametric solid models. (Degree Credit)

**DRAF 945 F Advanced Solidworks 3 Units****Prerequisite(s):** DRAF 944 F with a grade of C or better

45 hours lecture and 37 hours lab per term. This course provides the student with advanced instruction in the concept, practice, and development of feature-based solid modeling using Solidworks software. Students will demonstrate the features of the software by creating advanced 3D parametric solid models, assemblies and 2D hardcopy layouts. (Degree Credit)

## Faculty

Dan Carter

## Earth Sciences (ESC)

**ESC 100 F Physical Geology 3 Units**

54 hours lecture per term. This introductory course explores the physical composition of the earth and those processes that modify its surface. Topics include rocks and minerals, plate tectonics, earthquakes, volcanoes, landslides, flooding, groundwater, beach processes, and earth resources. Contemporary environmental changes such as global warming and resource acquisition problems will also be discussed. Concurrent enrollment in ESC 100LF is recommended. Field trips may be taken. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 100)

**ESC 100LF Physical Geology Lab 1 Unit****Corequisite(s):** ESC 100 F with a grade of C or better.

54 hours lab per term. This course covers identification of minerals and rocks, interpretation of topographic maps and geologic folios, study of landforms and rock structures and field studies. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOL 100L)

**ESC 101 F Earth Science Survey 3 Units**

54 hours lecture per term. This course explores the fields of geology, oceanography, meteorology, and astronomy. Topics include earthquake and volcanic processes, global current patterns, beach formation, hurricane and tornado development, and star and planetary evolution. Special emphasis is placed on contemporary human-induced environmental changes such as global warming and resource acquisition. Class discussions will also focus on the interaction between science and society. Laboratory not required but recommended. Field trips may be required outside of regularly-scheduled class times. Laboratory not required but recommended. (Degree Credit) (CSU) (UC Credit Limitation: no credit for ESC 101 F if taken after college level class in astronomy, meteorology, geology or oceanography) AA GE, CSU GE, IGETC (C-ID: GEOL 120)

**ESC 101LF Earth Science Survey Lab 1 Unit****Corequisite(s):** ESC 101 F with a grade of C or better.

54 hours lab per term. This course enhances topics covered in the ESC 101 F. This course includes exercises in identifying minerals and rocks, reading topographic maps, analyzing earthquakes, interpreting coastal processes, forecasting weather, and recognizing the stars and planets. Field trips may be taken. (Degree Credit) (CSU) (UC Credit Limitation: no credit for ESC 101LF if taken after college level class in astronomy, meteorology, geology or oceanography). CSU GE, IGETC (C-ID: GEOL 120L)

**ESC 102 F Survey of Natural Disasters 3 Units**

54 hours lecture per term. This course explores those natural disasters that affect human activities. Topics include earthquakes, floods, landslides, volcanoes, hurricanes, tornados and asteroid/meteor impacts. The consequences of pollution and population growth will also be explored. Hypothetical and case histories of natural disasters will also be studied. Class discussions will focus on aspects of regional planning, environmental laws and the interaction between science and society. Field trips are optional. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE

**ESC 103 F Historical Geology 4 Units**

54 hours lecture and 54 hours lab per term. This course covers the Earth's origin, geological development through time and history of its life are presented using the plate tectonic theory. The importance of environment to evolution and extinction of life forms are stressed. Study and classification of major rock and fossil groups, interpretation of geologic and topographic maps, and application of rock and fossil interpretations to geologic problems are included. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 111)

**ESC 104 F Geology of National Parks and Monuments 3 Units**

54 hours lecture per term. This course is a description of the broad geologic features of North America with special emphasis on the U.S. National Parks and Monuments. Photographic slides and rock samples will be used to illustrate the geologic significance of the parks and monuments. Utilizing the plate tectonic theory, a geologic history of North America will be deduced from the descriptive geology. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) AA GE, CSU GE

**ESC 105 F Introduction to Weather and Climate 3 Units**

54 hours lecture per term. This course examines the physical properties of the atmosphere including solar heating and cooling, atmospheric circulation, weather systems, extreme weather, atmospheric optics, climate change, and weather radar, maps and forecasting. The effects of human activities on Earth's climate will be emphasized. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 130)

**ESC 105LF Introduction to Weather and Climate Laboratory 1 Unit****Corequisite(s):** ESC 105 F with a grade of C or better.

9 hours lecture and 27 hours lab per term. This course offers lab studies to correspond to material covered in ESC 105 F. Fundamental concepts in meteorology and measurement techniques including selected mathematical concepts used in developing an understanding of weather and climate will be covered. Analysis of real-time weather data will be stressed. Each lab experience will be preceded by an orientation lecture/discussion period. This course may include field trips. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOG 130)

**ESC 106 F Geology of Orange County Area****2 Units**

36 hours lecture per term. This course examines the physical and historical geology of the Orange County area. The county will be analyzed for faults and folds, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips are required. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) AA GE

**ESC 107 F Earth Science for Educators****4 Units**

54 hours lecture and 54 hours lab per term. This course engages students in a study of our dynamic planet, including its astronomy, geology, oceanography, and meteorology. Topics include solar system and planetary formation, earthquake and volcanic processes, waves and beach processes, global oceanic and atmospheric circulation patterns, severe storm development, and climate change. While open to all students, this course is oriented towards preparing future science teachers. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 110 F Introduction to Climate Science****3 Units**

54 hours lecture per term. This course engages students in a study of climate science including global warming and climate change. Students will examine interactions among Earth's various climate subsystems - the hydrosphere, lithosphere, atmosphere and biosphere - and how exchanges of energy and matter between them govern Earth's climate. The interaction of humans with the climate system will be woven throughout. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116 F Astronomy****3 Units****Advisory:** MATH 020 F.

54 hours lecture per term. This course is an introduction to the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. High School Algebra and Plane Geometry or equivalents are highly desirable. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116HF Honors Astronomy****3 Units****Advisory:** MATH 020 F or math skills clearance

54 hours lecture per term. This Honors-enhanced course is an introduction of the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. As an Honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. High school algebra and plane geometry or the equivalents are highly desirable. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116LF Astronomy Lab****2 Units****Advisory:** MATH 020 F or math skills clearance and ESC 116 F.

72 hours lab per term. This course introduces the student to astronomical viewing and measurement as well as analysis of astronomical data. Students will do lab experiments to understand principles of astronomy and data analysis. They will use telescopes to make observations and gather data (or use computer images) and perform exercises relating to the moon, planets, stars, and galaxies. A field trip for dark sky observation may be arranged. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**ESC 117 F Field Astronomy****1 Unit****Advisory:** ESC 116 F and MATH 020 F or math skills clearance

18 hours lecture per term. This course is an introduction to methods of observational astronomy including naked eye, binocular and telescopic observations. Lectures will cover celestial sphere, celestial coordinates, motions of the sky, star charts and telescope optics. Students will be trained in using star charts, planispheres, planetarium software and telescopes. Overnight camping required. (Degree Credit) (CSU)

**ESC 120 F Geology of California****3 Units**

54 hours lecture per term. This course examines the physical and historical geology of California. Each of California's natural provinces will be analyzed for tectonic structures, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips may be taken. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 200)

**ESC 130 F Introduction to Oceanography****3 Units**

54 hours lecture per term. The lectures present a survey of the geological, physical, chemical, and biological principles and processes of oceanography. This course examines how these processes interact to form a variety of habitats within the marine ecosystem. An overview is provided of the physical properties of these habitats, along with the distribution and characteristics of organisms found within them. The interactions of humans with the marine environment is presented, as is an introduction to oceanographic tools and their uses. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 130HF Honors Introduction to Oceanography****3 Units**

54 hours lecture per term. This Honors-enhanced course presents a survey of the geological, physical, chemical, and biological principles and processes of oceanography. An overview is provided of the geological, physical and chemical properties of ocean ecosystems and examples are given of characteristics of organisms found within them. The role of technology and its application to studying the world ocean is woven throughout. Students will develop an understanding of the interaction of humans with the world ocean, especially in view of the critical scientific, environmental, social and political issues that emerge from ocean conservation efforts. Students are expected to critically analyze scientific and journalistic information and engage in written and oral debate to reach a deeper understanding of these issues. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 130LF Introduction to Oceanography: Field Experience****1 Unit****Corequisite(s):** ESC 130 F with a grade of C or better.

9 hours lecture and 27 hours lab per term. This course offers field studies to correspond to material covered in ESC 130 F. Each field experience will be preceded by an orientation lecture/discussion period. May include field work from boats. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**ESC 140 F Geology of California Coastal Areas****2 Units**

36 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas along California's coastline. Lectures will examine the geologic importance of coastal areas and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 141 F Geology of the Anza-Borrego Desert State Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Anza-Borrego Desert State Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 142 F Geology of Mojave Desert Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Mojave Desert area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ESC 143 F Geology of the Owens Valley and Mammoth Lakes Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Owens Valley-Mammoth Lakes area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 144 F Geology of Southern California Mountain Areas 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Transverse Ranges and Santa Ana Mountains area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 145 F Geology of the Death Valley National Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Death Valley National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ESC 146 F Geology of the Joshua Tree National Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Joshua Tree National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic hazards and the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU)

**ESC 147 F Geology of Colorado Plateau Areas 2 Units**

36 hours lecture per term. This course involves lecture and field study of geologic features and processes in selected areas of the Colorado Plateau. Lectures will explore the geologic significance of these areas and how to recognize key geologic hazards and resource potential. Areas of study may include Grand Canyon, Zion, Bryce Canyon, Capital Reef, Arches, and Canyonlands national parks. Students will be trained to use various scientific tools for conducting geologic field studies. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU)

**ESC 190 F Environmental Geology 3 Units**

54 hours lecture per term. This course explores those geologic processes that influence human activities. Topics include the geologic hazards, such as earthquakes, floods, landslides, and volcanoes; the occurrences and limitations of natural resources; and the consequences of pollution and waste disposal on the earth. Hypothetical and case histories of natural disasters will be studied. Class discussions will also focus on geologic aspects of regional planning, environmental laws, and the interaction between science and society. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 130)

**ESC 196 F Regional Field Studies in Geology 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas throughout the Southwestern United States. During a given semester, multiple sections may be offered to different study areas or for different topics. Lectures will examine the geologic importance of the area to be visited and how to recognize key geologic features in the field. Study areas include, but are not limited to, Mojave Desert, the Sierra Nevada, and coastal areas. Areas outside of California (i.e., Arizona, New Mexico) may also be selected. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 199 F Earth Science Independent Study 1-3 Units**

**Prerequisite(s):** ESC 100 F or ESC 101 F or ESC 130 F, with a grade of C or better  
54-162 hours independent study per term. This course involves lab and/or field investigations of earth science phenomena under the guidance of members of the earth sciences faculty. Designed primarily for majors in earth sciences, or teachers who wish to increase their knowledge of the sciences, the course provides individual study and small group interactions. Independent research problems with staff supervision are conducted upon approval. Hours to be arranged. Field trips may be required. Outside reading and a written report required. Presentation of research at scientific conferences is encouraged. Elective credit in the sciences area. (Degree Credit) (CSU) (UC review required)

**ESC 230 F Coastal Oceanography 3 Units**

36 hours lecture and 54 hours lab per term. This course engages students in a study of the geological, physical, chemical, and biological oceanography of the coastal ocean of Southern California and the California Current Large Marine Ecosystem. (Degree Credit) (CSU)

## Economics (ECON)

### ECON 101 F Principles of Economics - Micro 3 Units

**Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better or math skills clearance

54 hours lecture per term. This course presents the basic structure of the economic system of the United States and emphasizes the behavior of the firm within this structure. Special attention is given to the allocation of products and resources through the price mechanism. Topics treated include comparative economic systems, supply and demand, product and resource pricing, the market models, and general equilibrium. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 201)

### ECON 101HF Honors Principles of Economics - Micro 3 Units

**Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better or math skills clearance

54 hours lecture per term. This Honors-enhanced course presents the basic structure of the economic system of the United States and emphasizes the behavior of the firm within this structure. Topics include comparative economic systems, supply and demand, product and resource pricing, the market modules, and general equilibrium. Attention will be given to the quantitative methods used by economists. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 201)

### ECON 102 F Principles of Economics - Macro 3 Units

**Prerequisite(s):** ECON 101 F or ECON 101HF with a grade of C or better.

54 hours lecture per term. This course includes an analysis of macroeconomics, focusing on economic aggregates and the overall performance of the United States economy, with special emphasis on the role of government. Topics treated include national income, employment theory, business cycles, fiscal and monetary policies, equilibrium growth, and international economics. Some of the problems of specific sectors of the economy are examined. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 202)

### ECON 102HF Honors Principles of Economics-Macro 3 Units

**Prerequisite(s):** ECON 101 F or ECON 101 HF with a grade of C or better

54 hours lecture per term. This Honors-enhanced course includes an analysis of macroeconomics, focusing on economic aggregates and the overall performance of the United States economy, with special emphasis on the role of government. Topics treated include national income, employment theory, business cycles, fiscal and monetary policies, equilibrium growth, and international economics. Some of the problems of specific sectors of the economy are examined. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 202)

## Engineering (ENGR)

### ENGR 101AF Surveying I 4 Units

**Prerequisite(s):** MATH 142 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers the principles and practices of measuring distances, elevations and angles. Topics include leveling, traversing, horizontal and vertical curves, topography, and use and care of instruments and equipment. (Degree Credit) (CSU) (C-ID: ENGR 180)

### ENGR 105 F Engineering CAD 4 Units

**Prerequisite(s):** MATH 142 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This is an introductory course which utilizes the CAD system for engineering applications. The course incorporates elementary principles associated with the various menu and command structures in computer-assisted drafting in order to develop solutions to 2D and 3D design problems. Topics included are file management, layering, orthographic projection, dimensioning, line types and axonometric projection. (Degree Credit) (CSU) (UC) (C-ID: ENGR 150)

### ENGR 110 F Introduction to Engineering 3 Units

**Prerequisite(s):** MATH 040 F with a grade of C or better

**Advisory:** ENGL 100 F or 100HF

54 hours lecture per term. This course is an introduction to engineering as a profession and its associated career responsibilities and opportunities. The course includes a selection of computational and mathematical methods and tools to be found useful in problem solving in engineering. Dimensional analysis, graphical techniques, and design theory in engineering analysis is also studied. The course includes the application of engineering and scientific problem methods to introductory electric circuit problems. This course also meets requirements for credit in Engineering. (Degree Credit) (CSU) (C-ID: ENGR 110)

### ENGR 201 F Statics 3 Units

**Prerequisite(s):** MATH 152 F or MATH 152HF and PHYS 221 F with a grade of C or better

54 hours lecture per term. This course applies equilibrium conditions of force and moments to engineering problems. Algebraic and graphical methods are used. Topics include equilibrium of particles and rigid bodies, trusses, beams, frames, machines, centroids and friction. (Degree Credit) (CSU) (UC) (C-ID: ENGR 130)

### ENGR 203 F Electric Circuits 4 Units

**Prerequisite(s):** MATH 152 F or MATH 152HF and PHYS 222 F, with a grade of C or better.

Corequisite: ENGR 203LF with a grade of C or better. 72 hours lecture per term. This course is an introduction to the analysis of electric circuits. Analysis techniques include nodal analysis, loop analysis, superposition method, Thevenin's Theorem, Norton's Theorem and source transformation. RLC and op-amp networks are analyzed under DC, AC-steady state, transient and variable frequency conditions. (Degree Credit) (CSU) (UC) (C-ID: ENGR 260)

### ENGR 203LF Electric Circuits Lab 1 Unit

**Prerequisite(s):** MATH 152 F or MATH 152HF and PHY 222 F, with a grade of C or better

Corequisite: ENGR 203 F with a grade of C or better. 54 hours lab per term. This course covers basic electrical measurement techniques and experimental investigation of simple circuits, as well as computer simulations of transient circuits. (Degree Credit) (CSU) (UC) (C-ID: ENGR 260L)

### ENGR 220 F Programming and Problem-Solving in MATLAB 3 Units

**Prerequisite(s):** MATH 151 F or MATH 151HF, with a grade of C or better

36 hours lecture and 54 hours lab per term. This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to science and engineering. This course introduces the fundamentals of procedural and object-oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics, and mathematics. (Degree Credit) (CSU) (C-ID: ENGR 220)



# English (ENGL)

## ENGL 059 F Developmental Writing

4 Units

**Advisory:** READ 056 F or any Reading course.

72 hours lecture per term. This course is designed for native speakers of English who need to build basic English skills in writing, reading and thinking. It provides instruction in writing effective sentences, reading short essays, thesis development, structure of paragraphs and essays, vocabulary building, basic critical thinking, and study skills. Pass/No Pass only.

## ENGL 060 F Preparation for College Writing

4 Units

**Prerequisite(s):** ENGL 059 F with a grade of Pass or recommended score on the English Placement test

**Advisory:** READ 096 F

72 hours lecture per term. This course is designed to meet the needs of students who are developing the writing and editing skills necessary for college writing. Students will review the writing process, thesis statements, essay structure, organization and general mechanics, read and analyze professional essays, and write essays with an emphasis on exposition and critical thinking. Pass/No Pass only.

## ENGL 099 F Accelerated Preparation for College Writing

4 Units

**Advisory:** READ 096 F or any other reading course.

72 hours lecture and 18 hours lab per term. This course prepares students for transfer-level college writing in a highly intensive, accelerated format and has no prerequisite. Students will review English fundamentals, read and analyze professional essays, and write essays with an emphasis on exposition and critical thinking. Pass/No Pass only.

## ENGL 100 F College Writing

4 Units

**Prerequisite(s):** ENGL 060 F or ENGL 099 F, with a grade of Pass, or ESL 186 F or ESL 190 F, with a grade of C or Pass, or equivalent or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 142 F.

72 hours lecture per term. This college-level composition course is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. The course includes research and documentation skills. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

## ENGL 100HF Honors College Writing

4 Units

**Prerequisite(s):** ENGL 060 F or ENGL 099 F, with a grade of Pass, or ESL 186 F or ESL 190 F, with a grade of C or Pass, or equivalent or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 142 F. 72 hours lecture per term. This Honors-enhanced course in composition is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. The course includes research and documentation skills. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

## ENGL 101 F Enhanced College Writing

5 Units

**Prerequisite(s):** ENGL 060 F or ENGL 099 F, with a grade of Pass, or ESL 186 F or ESL 190 F, with a grade of C or Pass, or equivalent or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 096 F.

90 hours lecture per term. This course in college-level composition is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. This course includes research and documentation skills. This course includes a fifth hour of instruction per week to help students develop the reading, writing, and study skills necessary for academic success. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

## ENGL 102 F Introduction to Literature

3 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This course will introduce a variety of literary genres such as fiction, poetry, drama and film. Students will read, analyze, and write about literature. Different critical approaches to literature will also be included. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 120)

## ENGL 102HF Honors Introduction to Literature

3 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This Honors-enhanced course is a continuation of ENGL 100 F, uses literary works as content for reading and writing with emphasis on analytical and critical approaches to drama, poetry and prose fiction. This course will employ enhanced teaching methods such as a seminar approach, more researched based writing assignments, and assignments calling for a higher level of critical thinking. The overall content and amount of work required in ENGL 102HF will be the same as non-honors ENGL 102 F. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 120)

## ENGL 103 F Critical Reasoning and Writing

4 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

72 hours lecture per term. This course is designed to develop critical thinking, reading, and writing skills beyond the level achieved in ENGL 100 F. This course will focus on the development of logical reasoning and analytical and argumentative writing skills as well as information literacy. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 105)

## ENGL 103HF Honors Critical Reasoning and Writing

4 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

72 hours lecture per term. This Honors-enhanced course is designed to develop critical thinking, reading, and writing skills, beyond the level achieved in ENGL 100 F or ENGL 100HF. The course will focus on the development of logical reasoning and analytical and argumentative writing skills. As an Honors section, this class will offer an enhanced approach to critical thinking, calling on students to take a more active role in the learning process. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 105)

**ENGL 104 F Critical Thinking and Writing About Literature 4 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

72 hours lecture per term. This course will develop critical thinking, reading, and writing skills as they apply to the analysis of literature and literary criticism from diverse cultural sources and perspectives. There will be an emphasis on the techniques and principles of effective written argument as they apply to literature. Research strategies, information literacy and proper documentation of courses will also be emphasized. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 110)

**ENGL 105 F Introduction to Creative Writing 3 Units**

**Prerequisite(s):** Eligibility for ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, or as determined by multiple measures of assessment.

**Advisory:** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F.

54 hours lecture per term. This course includes writing original fiction, creative nonfiction, and poetry; study and application of forms, techniques, and literary elements of creative writing, and workshop experience, which provides an opportunity for analyzing and critiquing student writing. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ENGL 200)

**ENGL 110 F Enhanced College Writing for Non-Native Speakers 5 Units**

**Prerequisite(s):** ESL 186 F or ESL 190 F, with a grade of C or better or Pass, or ESL skills evaluation.

**Advisory:** ESL 189 F.

90 hours lecture per term. This course emphasizes advanced reading, writing, and critical thinking skills that are essential for successful completion of a four-year college program including research and documentation skills. Writing assignments include expository and argumentative essays based on analysis of a variety of complex readings. This course includes additional instruction in grammatical structures and vocabulary usage to empower non-native speakers to write with increasing clarity and style. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

**ENGL 201 F Intermediate College Writing 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This course is designed to develop academic writing and critical thinking skills beyond the level achieved in ENGL 100 F. The course will stress analysis and evaluation of sources, integration of a variety of rhetorical strategies, and research and documentation methods necessary for successful academic writing in essays, reports, critiques, exams, and research papers. Assignments are designed to address cross-curricular needs of students from a variety of majors. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 105)

**ENGL 203 F Introduction to Dramatic Literature 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF. 54 hours lecture per term. This course requires students to read, watch, and discuss a variety of plays from the Greeks to the contemporary period. Students will demonstrate analysis and evaluation of dramatic literature through essays and exams. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 204 F Introduction to Poetry 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 or ENGL 102HF.

54 hours lecture per term. This course covers the reading and study of poems from ancient to modern times in English and in translation. Poets represented may include Blake, Dickinson, Donne, Eliot, Frost, Keats, Neruda, Paz, Shakespeare, Whitman, Yeats and Levertov. The focus of the course is on the analysis of poetic techniques and the interpretation of universal themes. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 207 F The Short Story 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course involves the reading and discussion of selected short stories emphasizing analysis, interpretation, and evaluation. The course will focus on the short story as a genre. There will be an emphasis on the cultural and historical contexts of the texts covered and on the variety of writers and styles. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 208 F Introduction to Film Studies 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture and 18 hours lab per term. This course is an introduction to the discipline of film analysis from aesthetic, cultural, and historical perspectives. Films from a variety of countries and historical periods may be viewed and analyzed. Analysis, interpretation, and writing techniques will be emphasized. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 209 F Intermediate Creative Writing 3 Units**

**Prerequisite(s):** ENGL 105 F with a grade of C or better.

54 hours lecture per term. This course continues the study and application of writing original fiction, creative nonfiction and poetry. This course introduces the process of publishing. Workshops, peer critiquing and the submission process are emphasized. (Degree Credit) (CSU) (UC) AA GE

**ENGL 210 F Introduction to Language Structure and Use 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This course offers students an introduction to the nature and structure of human language and use, covering fundamental elements of phonology, phonics, morphology, etymology and pragmatics. This course will explore first and second language acquisition and development. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**ENGL 211 F British Literature to 1800 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of British literature from the Middle Ages to 1800 and emphasizes literary trends and historical backgrounds, as well as the development of English. The course includes readings by such writers as the Pearl Poet, Chaucer, Shakespeare, Lanyer, Donne, Milton, Behn, Swift, and Pope. Texts will be considered from diverse perspectives. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 160)

**ENGL 211HF Honors British Literature to 1800 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of British literature from the Middle Ages to 1800 and emphasizes literary trends and historical backgrounds, as well as the development of English. This course includes readings by such writers as the Pearl Poet, Chaucer, Shakespeare, Lanyer, Donne, Milton, Behn, Swift, and Pope. Texts will be considered from diverse perspectives. This course emphasizes discussion and exchanges based on students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 160)

**ENGL 212 F British Literature since 1800 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of literature written in English from 1800 to the present and will emphasize literary trends and historical backgrounds. Students will read and discuss fiction, poetry, drama, and prose from the Romantic, Victorian, Modern, Postmodern and Postcolonial eras in Great Britain and other countries of the Empire and Commonwealth. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 165)

**ENGL 212HF Honors British Literature since 1800 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of literature written in English from 1800 to the present and will emphasize literary trends and historical backgrounds. Students will read and discuss fiction, poetry, drama, and prose from the Romantic, Victorian, Modern, Postmodern and Postcolonial eras in Great Britain and other countries of the Empire and Commonwealth. This course emphasizes discussion and exchange based upon students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 165)

**ENGL 221 F American Literature to the Civil War 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

This course is a survey of representative American works from before the era of colonization through the Civil War, emphasizing historic backgrounds of American fiction, poetry, and prose. The course includes major writers such as Hawthorne, Poe, Melville, Emerson, Douglass, Thoreau, Dickinson, and Whitman. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 221HF Honors American Literature to the Civil War 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of representative works by American writers from before the era of colonization through the Civil War, emphasizing historical backgrounds of American fiction, poetry, and prose. This course includes major writers such as Hawthorne, Poe, Melville, Emerson, Douglass, Thoreau, Dickinson, and Whitman. This course emphasizes discussion and exchange based upon students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 130)

**ENGL 222 F American Literature from the Civil War to the Present 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of representative works by American writers since 1865, and it emphasizes literary trends in and historic backgrounds of American drama, fiction, poetry, and prose. The course includes a consideration of Realism, Regionalism, Naturalism, Modernism, and Postmodernism through the study and critical discussion of representative writers central to the development of American literature. The emphasis is on the diversity of American subjects and styles. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 135)

**ENGL 222HF Honors American Literature from the Civil War to the Present 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of representative works by American writers since 1865, and it emphasizes literary trends in and historic backgrounds of American drama, fiction, poetry, and prose. This course includes a consideration of Realism, Regionalism, Naturalism, Modernism, and Postmodernism through the study and critical discussion of representative writers central to the development of American literature. The emphasis is on the diversity of American subjects and styles. This course emphasizes discussion and exchange based on students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 135)

**ENGL 224 F World Literature through the Early Modern Period 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, and other areas, from antiquity to the mid- or late-17th century. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 140)

**ENGL 224HF Honors World Literature through the Early Modern Period 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, and other areas, from antiquity to the mid- or late-17th century. This course Honors seminar course emphasizes discussion and exchange based on students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 140)

**ENGL 225 F World Literature since the Early Modern Period 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and Latin America from the late 17th century to today. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 145)

**ENGL 225HF Honors World Literature since the Early Modern Period****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This Honors-enhanced course is a comparative study of selected works, in translation and English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and Latin America from the late 17th century to today. This course emphasizes discussion and exchange based on students' presentations and independent research. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 145)

**ENGL 234 F Introduction to Shakespeare****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is designed to introduce students to William Shakespeare's tragedies, comedies, histories and romances, as well as poetry. Students will develop an understanding of Shakespeare's plays, their original context and their relevance for today, considered from diverse perspectives. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 234HF Honors Introduction to Shakespeare****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

This Honors-enhanced course introduces students to William Shakespeare's tragedies, comedies, histories and romances, as well as poetry. Students will develop an understanding of Shakespeare's plays, their original context and their relevance for today, considered from diverse perspectives. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 239 F Survey of Children's Literature****3 Units****Prerequisite(s):** Eligibility for ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, or as determined by multiple measures of assessment.**Advisory:** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, and ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course traces the historical and cultural development of children's literature throughout the world, from its multiple origins in the oral tradition to its contemporary emphasis on written excellence and pictorial artistry. The course focuses on comparative and critical approaches to the multicultural elements in nursery rhymes, poetry, fables, folk tales, myth, sacred literature, picture books, juvenile literature, and works of non-fiction, with emphasis on contemporary literature and the emergence of ethnic writers in children's literature. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 180)

**ENGL 240 F Survey of Young Adult Literature****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course presents an overview of young adult literature, including its history, characteristics, literary merit, and cultural influence. This course focuses on comparative and critical approaches to literary works intended for young adults (7th-12th grader) and the study of the literature's relevance to its target audience, with an emphasis on texts representative of diverse ethnic and underrepresented groups. Students will survey current trends and issues in the field of the literature's relationship to adolescent psychosocial development and to ethnic and cultural identity development. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 243 F Folklore and Mythology****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

This course is an introductory study of the folklore and mythology of the world through literature, including such cultures as Egyptian, Babylonian, Greek, Norse, Hindu, Chinese, Scandinavian, Native American, Central and South American, and African. This course will include a comparative study of mythic elements and patterns with their modern parallels. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 243HF Honors Folklore and Mythology****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course is an introductory study of the folklore and mythology of representative cultures of the world through literature including such cultures as Greek, Norse, Babylonian, American Indian, European, Mexican, Hindu, and Chinese. The course will include a comparative study of mythic elements and patterns with their modern parallels in both Eastern and Western civilizations. This honors section is conducted as a seminar and relies on independent student research done outside of class. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 245 F The Bible as Literature****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

This course involves the study of the English Bible as literature, focusing on its literary forms and techniques. The course emphasizes analysis of such forms as narrative prose, poetry, letters, and wisdom literature. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 246 F The Novel****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

This course is a study of the novel as an art form, concentrating on representative novels illustrating the richness of the form. Emphasis will be placed on developing the students' analytical skills. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 248 F Science Fiction****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of science fiction and speculative fiction. This course emphasizes the literary, social, economic, cultural and environmental contexts of representative works and traces the development of the genre from early scientific romances and speculative works through current trends. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 249 F Survey of Chicano/a Literature****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course offers students a survey of Chicano/a literature from its beginnings in the nineteenth century to the present day. It emphasizes the literary, historical, social, political and cultural context of Chicano/a fiction, poetry, theater and prose. Students can expect to read major literary classics as well as the works of previously less recognized writers. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 251 F Survey of Native American Literature 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of Native American literary tradition from its beginnings as an oral tradition to contemporary works by representative authors. This course emphasizes the historical, cultural and literary context of work written by Native American authors in a variety of genres including poetry, fiction, autobiography, told-to autobiographies, oral tradition, folklore and mythology, speeches, and mixed genres. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 254 F Intermediate Creative Writing: Poetry 3 Units**  
**Prerequisite(s):** ENGL 105 F with a grade of C or better

**Advisory:** ENGL 102 F or ENGL 102HF

This course continues the development of creative writing skills with an emphasis on poetry. Students will write original poetry, study forms, techniques, and literary elements of poetry including classical poetic forms and the free-verse tradition, and study non-fiction essays related to the writing of poetry. (Degree Credit) (CSU) (UC) AA GE

**ENGL 255 F Intermediate Creative Writing: Fiction 3 Units**  
**Prerequisite(s):** ENGL 105 F with a grade of C or better

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course includes writing original fiction; study and application of forms, techniques and literary elements of fiction including classic short story and novel forms; study of modern, less traditional forms such as creative non-fiction; study of essays related to the writing of fiction; and workshop experience which provides an opportunity for analyzing and critiquing student writing. (Degree Credit) (CSU) (UC) AA GE

**ENGL 280 F Language Arts Tutoring Practicum 3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better.

and recommendation from an English instructor

Corequisite: ENGL 103 F or ENGL 103HF, or ENGL 104 F, or ENGL 201 F. 36 hours lecture and 54 hours lab per term. This course provides training for students to acquire specific knowledge, skills and techniques for tutoring in writing and provides strong recommendation for future employment in Fullerton College's Writing Center. Supervised, "hands-on" tutoring lab hours are part of instruction. (Degree Credit) (CSU)

**ENGL 299 F English Independent Study 1 Unit**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours independent study per term. This course will provide advanced students the opportunity for independent study that will enrich their academic experience in English. Students may choose to expand and deepen their knowledge in areas of composition, language, literature or creative writing, or special topics not covered in existing courses offered in English. Students will attend weekly arranged individual conferences or group meetings. (Degree Credit) (CSU) (UC review required) (UC Credit Limitation depending upon course content)

## English as a Second Language (ESL)

**ESL 010 F Basic College Technology for Language Development 1 Unit**

18 hours lecture per term. This course is designed to develop high-beginning to intermediate English learners' use of technology for language development. Students will explore a variety of texts, platforms, applications, and programs that will enhance their language skills and strategies while preparing them for academic success in an increasingly online environment. Pass/No Pass only.

**ESL 012 F Language and Culture through Song Lyrics 1 Unit**

18 hours lecture per term. This course introduces low intermediate and intermediate non-native speakers of English to popular and historical American songs. By studying the lyrics and the stories behind the songs, students will gain insight into American culture and history, expand vocabulary, and enhance their listening, reading, grammar, critical thinking, pronunciation, and oral communication skills. Pass/No Pass only.

**ESL 025 F Basic English Grammar for Non-Native Speakers 3 Units**

54 hours lecture per term. This course is designed to increase students' knowledge and usage of verb tenses, sentence structure, and other basic grammatical topics. It will develop grammatical accuracy in listening, speaking, reading and writing. Pass/No Pass only.

**ESL 029 F Idiomatic Expressions for Non-Native Speakers 2 Units**

36 hours lecture per term. This course provides instruction in common American English idioms, phrasal verbs, slang and taboo terminology, proverbs, and other fixed expressions. Additional topics include context clues, dictionary use, relaxed speech, and cultural aspects of idiomatic expressions. The course is designed for high beginning to intermediate ESL students. Pass/No Pass only.

**ESL 035 F Intermediate English Grammar for Non-Native Speakers 3 Units**

54 hours lecture per term. This course is designed to increase intermediate students' knowledge and usage of complex verb tenses and sentence structure. It will also develop grammatical competency in reading, writing and speaking. Pass/No Pass only.

**ESL 036 F Basic Conversation 3 Units**

54 hours lecture per term. This course is designed to improve beginning students' ability to speak and understand English in simple every day and academic situations. It will provide practice in basic oral communication functions as well as beginning academic listening and speaking skills. Pass/No Pass only.

**ESL 038 F Fundamentals of American English Pronunciation for Non-Native Speakers 2 Units**

36 hours lecture per term. This course is designed to develop basic pronunciation, to establish better oral control of language, and to build confidence in simple oral expression. Pass/No Pass only.

**ESL 039 F Vocabulary Expansion Techniques for Non-Native Speakers 3 Units**

54 hours lecture per term. This course provides instruction in vocabulary expansion principles and techniques for high beginning to intermediate students of English as a second language (ESL). Topics include context clues, word parts, mnemonic devices, word relationships, and dictionary use. Also emphasized are grammatical, collocational, and pragmatic restrictions on vocabulary. Pass/No Pass only.

**ESL 045 F Advanced English Grammar for Non-Native Speakers 3 Units**

54 hours lecture per term. This course is designed to increase an advanced student's knowledge and usage of advanced English grammar, to improve grammatical accuracy in writing and to develop strong editing skills. Pass/No Pass only.

**ESL 046 F Intermediate Conversation for Non-Native Speakers 2 Units**

36 hours lecture per term. This course is designed to improve students' ability to comprehend and communicate in English on a variety of everyday topics. Students will develop and practice techniques for greater composure and confidence in oral expression. Pass/No Pass only.

**ESL 047 F Academic Preparation for Non-Native Speakers 2 Units**

36 hours lecture per term. This course is designed to orient second language students to college life. The course includes information about academic vocabulary, academic textbooks, and college instructor expectations; instruction in exam taking and study skills; explanation of cultural differences in relation to the college setting. Pass/No Pass only.

**ESL 048 F Intermediate Pronunciation for Non-Native Speakers 2 Units**

36 hours lecture per term. This course is designed to develop intermediate pronunciation skills, to structure more style in oral language, and to build confidence in basic oral expression. Pass/No Pass only.

**ESL 049 F Advanced Academic Vocabulary for Non-Native Speakers****3 Units**

54 hours lecture per term. This course provides instruction in academic vocabulary for advanced students of English as a second language (ESL). Emphasis is on the acquisition and consolidation of an expanded university-level vocabulary. Also presented are academic vocabulary learning principles and techniques including context clues, reference works, word parts, derivational forms, as well as grammatical and collocational restrictions on lexical items. Pass/No Pass only.

**ESL 056 F Advanced Conversation for Non-Native Speakers 2 Units**

36 hours lecture per term. This course is designed to improve advanced students' comprehension and oral communication in English on a broad range of academic subjects. Pass/No Pass only.

**ESL 058 F Advanced Pronunciation for Non-Native Speakers 2 Units**

36 hours lecture per term. This course is designed to refine pronunciation, to reduce foreign accent, and to build confidence in complex oral expression. Pass/No Pass only.

**ESL 076 F Multiple Skills Preparation for Non-Native Speakers: Reading, Speaking and Vocabulary 5 Units**

*Prerequisite(s):* ESL skills evaluation

90 hours lecture and 18 arranged hours lab per term. This course is designed for low intermediate and intermediate non-native speakers of English. This course provides intensive instruction in reading, oral communication, and vocabulary development. Students may enroll in ESL 076 F and ESL 078 F concurrently. Pass/No Pass only.

**ESL 078 F Multiple Skills Preparation for Non-Native Speakers: Listening, Writing and Grammar 5 Units**

*Prerequisite(s):* ESL skills evaluation

90 hours lecture and 18 arranged hours lab per term. This course is designed for low-intermediate and intermediate non-native speakers of English. This course provides intensive instruction in listening comprehension, sentence and paragraph level writing, and basic grammar. Students may enroll in ESL 076 F and ESL 078 F concurrently. Pass/No Pass only.

**ESL 082 F Intermediate Reading and Writing for Non-Native Speakers of English 5 Units**

*Advisory:* ESL Assessment

This course is designed for low-intermediate and intermediate non-native speakers of English. This course provides intensive instruction in oral communication, basic grammar, reading, sentence and paragraph writing, and vocabulary development. Pass/No Pass only.

**ESL 083 F High Intermediate Reading and Writing for Non-Native Speakers 5 Units**

*Prerequisite(s):* ESL 076 F with a grade of Pass and ESL 078 F with a grade of Pass or ESL 082 F with a grade of Pass or ESL assessment.

90 hours lecture and 18 arranged hours lab per term. This course, designed for high-intermediate students of English, provides instruction in critical reading and expository paragraph writing. Application of grammar concepts, sentence variety, and vocabulary development are also emphasized. This course offers continuing practice in listening and speaking skills. Pass/No Pass or Letter Grade option.

**ESL 184 F Low Advanced Reading and Writing for Non-Native Speakers 5 Units**

*Prerequisite(s):* ESL 083 F with a grade of C or better or Pass or ESL skills evaluation

90 hours lecture and 18 arranged lab hours per term. This course provides instruction in academic reading with an emphasis on culturally diverse and global topics, critical thinking, and short essay writing, along with advanced grammatical concepts. This course offers continuing practice in listening and speaking skills. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: ESL 184 F, ESL 185 F, ESL 186 F, and ESL 190 F combined; maximum credit, 8 units)

**ESL 185 F Advanced Reading and Writing for Non-Native Speakers 5 Units**

*Prerequisite(s):* ESL 184 F with a grade of C or better or Pass or ESL skills evaluation.

90 hours lecture and 18 hours arranged lab per term. This course is designed for advanced students of English and this course primarily emphasizes critical reading and expository essay writing with an emphasis placed on culturally diverse literature and topics; the course promotes continued practice in listening comprehension and oral communication. This course meets the Reading Graduation Requirement for the Associate Degree at Fullerton College. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (Credit Limitation: ESL 184 F, ESL 185 F, ESL 186 F, and ESL 190 F combined; maximum credit, 8 units)

**ESL 186 F Introduction to Critical Reading and College Writing for Non-Native Speakers (formerly College Writing Preparation for Non-Native Speakers) 5 Units**

*Prerequisite(s):* ESL 185 F with a grade of C or better or Pass or ESL Skills Evaluation

90 hours lecture per term. This course is designed to prepare advanced students for college level writing, and provides review of English fundamentals and practice in college-level reading, critical thinking, expository essay writing and basic research skills with an emphasis placed on culturally-diverse literature and topics. This course also offers continued practice in special grammar and sentence structure problems common to second language learners. This course meets the Reading Graduation Requirement for the Associate Degree at Fullerton College. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: ESL 184 F, ESL 185 F, ESL 186 F, and ESL 190 F combined; maximum credit, 8 units) AA GE, CSU GE, IGETC

**ESL 189 F Advanced Reading for Non-Native Speakers 3 Units**

**Prerequisite(s):** ESL 184 F with a grade of C or Pass or ESL skills evaluation

54 hours lecture per term. This course will help prepare English language learners for academic reading at the college level. Particular emphasis will be placed on those problems faced by non-native English speakers. Students will expand their skills in critical thinking, analysis, vocabulary development, and reading comprehension. Reading material will include content area textbooks, newspaper and magazine articles, and other non-adapted pieces of writing with an emphasis placed on culturally-diverse literature and topics. This course satisfies the Reading Graduation requirement for the Associate degree. Letter Grade or Pass/No Pass option. (CSU) (Degree Credit)

**ESL 190 F Advanced Accelerated English for Non-Native Speakers of English 5 Units**

**Prerequisite(s):** ESL 184 F with a grade of C or better or Pass or recommended score on the ESL Skills Evaluation

**Advisory:** ESL 189 F

90 hours lecture and 18 hours arranged lab per term. This course is designed for advanced students of English who are non-native speakers and are interested in accelerating their progress to college-level writing. This intensive course primarily emphasizes critical reading on culturally diverse topics and expository essay writing and basic research skills in preparation for college-level writing. This course meets the Reading Graduation Requirements for the Associate Degree at Fullerton College. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: ESL 184 F, ESL 185 F, ESL 186 F, and ESL 190 F combined; maximum credit, 8 units)

## Faculty

Elizabeth Gaitatjis  
Arthur Hui  
Ellen Rosen  
Jefferson Tiangco

## Environmental Sciences (ENVS)

**ENVS 105 F Environmental Biology 3 Units**

54 hours lecture per term. This course is for non-science majors and introduces the student to the principles of organismal biology, framed in the context of Earth's natural environments. The course examines the interactive relationships between the environment and biological phenomena on all levels. In this exposé, the course explores Earth's environmental systems including: global climate system, atmospheric system, aquatic systems, and terrestrial and aquatic ecosystems. The course highlights life's influence on these systems in terms of core biological phenomena including: molecular biology, cellular biology, cellular respiration, photosynthesis, genetics, ecology, evolution, and biodiversity. The course analyzes how both robust and delicate biological systems adjust to a variety of human influences to produce complex environmental transformations. The course emphasizes the fundamental utility of reason and empiricism in scientific discovery and understanding. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENVS 105LF Environmental Biology Lab 1 Unit**

**Advisory:** Concurrent enrollment in ENVS 105 F or completion of ENVS 105 F with a grade of C or better.

9 hours lecture and 27 hours lab or field study per term. This course reveals core biological principles framed in lab and field investigations. Exercises focus on the interactive relationships between biological and physical phenomena on all levels (molecular, cellular, organismal, and ecological). Lab investigations promote the skills of objective experimental design, systematic experimental execution, and accurate results analysis. Field investigations strengthen students' powers of observation in the natural world. Skill development includes making thorough empirical observations, situational awareness of the interactive dynamics of living and non-living components in natural settings, and becoming knowledgeable of local wild species. The course emphasizes the fundamental utility of reason and empiricism in scientific discovery and understanding. Some fees may be required for parking and entrance fees at field trip locations. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**ENVS 140 F Introduction to the Natural History of Birds (formerly Birds of Southern California) 1-2 Units**

18 hours lecture per term. This course is a field-oriented course designed to introduce wildlife enthusiasts to the remarkable diversity of birds in Southern California. Students will learn how to identify birds using visual, auditory, and habitat clues in the field. Proper use of field guides, binoculars and spotting scopes, and birding ethics will be emphasized. Although the primary emphasis of this course is placed on bird identification, the ecological context for each species also will be treated, including: ecological niche, life history patterns, migratory patterns, and special adaptations. Field trips are required and may include day trips and/or overnight camping trips. (Degree Credit) (CSU)

**ENVS 141 F Desert Natural History 1 Unit**

18 hours lecture per term. This course applies ecological principles to investigate desert environments. Activities include lecture on ecological principles and field study in selected California desert ecosystems. Lectures will provide an overview of field natural history concepts, including identification of plants and animals, adaptations to arid environments and ecological interrelationships. Field trips are required and will take place during scheduled class times. Fees may be required to cover camping and site entrance fees. (Degree Credit) (CSU)

**ENVS 142 F Geology and Marine Biology of the Channel Islands 2 Units**

36 hours lecture per term. This course involves lecture and field study of geological and marine biological processes and features in the Channel Islands region of Southern California. Lectures will examine how to recognize key geologic landforms and marine habitats in the field. Particular attention will be focused on the relationship between geology and the marine life. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. An additional fee will be required to cover parking, entrance fees, transportation to island, camping, and site guide services. (Degree Credit) (CSU)

**ENVS 196 F Regional Field Studies: Environmental Sciences 1 or 2 Units**

18-36 hours lecture per term. Classes are conducted in the short course format, and require participation in fieldwork in a selected biological community in southwestern United States, Mexico, or Costa Rica. Field studies are designed to develop a strong foundation in ecological facts and principles. Emphasis is placed on identifying and studying ecological issues through careful observation, data collection and analysis. Students are trained in various field study techniques and the use of science instruments. Topics include auto-ecological and synecological studies of biological communities, monitoring abiotic factors, field identification of flora and fauna, and human impact on the study area. (Degree Credit) (CSU)

## Ethnic Studies (ETHS)

### ETHS 101 F American Ethnic Studies

**3 Units**

54 hours lecture per term. This introductory course is a comparative and interdisciplinary examination of the experiences of Black, Indigenous and People of Color in the United States from the colonial era to today. Students will analyze historical themes through an intersectional analysis that interrogates categories of identity and power including race, ethnicity, class, gender, sexuality, religion, etc. The course explores theoretical concepts and social processes including colonization and migration; racialization and the development of race as a social category; the relationship between race and U.S. imperialism; the persistence of social inequalities; and the long historical struggle for racial justice. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

### ETHS 101HF Honors American Ethnic Studies

**3 Units**

54 hours lecture per term. This Honors-enhanced course is a comparative and interdisciplinary examination of the experiences of Black, Indigenous People of Color in the United States from the colonial era to today. Students will analyze historical themes through an intersectional analysis that interrogates categories of identity and power including race, ethnicity, class, gender, sexuality, religion, etc. The course explores theoretical concepts and social processes including colonization and migration; racialization and the development of race as a social category; the relationship between race and U.S. imperialism; the persistence of social inequalities; and the long historical struggle for racial justice. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

### ETHS 111 F Women of Color in the U.S.

**3 Units**

54 hours lecture per term. This course is a comparative study of the experiences of women of color in the United States. Ranging from theoretical to first-person narrative, the interdisciplinary readings in this course examine interlocking categories of power that include race, ethnicity, gender, sexuality, class, and culture. Students will explore feminist of color critiques of imperialism, capitalism, nationalism, immigration, labor, gendered violence, representation, and public policy. We will focus on oppositional consciousness and resistance to oppression in the scholarship and literature of African American, Asian American, Pacific Islander American, Caribbean, Latinx, Indigenous, and Arab American feminists and the ways they engage in liberatory practices that aim to eliminate social inequities and all forms of oppression. Students may be required to attend a relevant academic conference or community event as part of the course. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 120

### ETHS 129 F Introduction to African-American Studies

**3 Units**

54 hours lecture per term. This survey course presents the student with an examination of the African American experience, and traces the role and contributions of Black people in the development of the United States. Included are such major topics as origins in Africa and the historical development of the Black community and culture as they evolved in the United States. An emphasis will be placed on the basic terms and references that give substance to Africana studies, as well as contemporary Black issues. This course fulfills the Multicultural Education Requirement for graduation. Field trips outside of regularly-scheduled class time will be required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### ETHS 130 F African-American History I

**3 Units**

54 hours lecture per term. This course is a survey of the African-American experience in the United States from its African roots to 1865, emphasizing the roles of African Americans in the political, social, and economic development of American society. Topics covered include: the trans-Atlantic slave trade, the process of enslavement in the Americas, slave life on the plantation, slave resistance, the socio-economic conditions of free Blacks in the United States, the politico-economic dispute regarding slavery and its consequences in the outbreak of the American Civil War, and the emancipation of the enslaved Black population. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

### ETHS 131 F African-American History II

**3 Units**

54 hours lecture per term. This course is a survey of the African-American experience in the United States from the Era of Reconstruction to the present, emphasizing the roles of African Americans in the political, social, and economic development of American society. Topics covered include: the various phases of the Reconstruction period; Black life in the "New South"; the debates over educational and socio-economic progress; the migrations to the North and West; the struggles of the Black working class; the impact of the two world wars on Black life; the Civil Rights Movement; militancy during the 1960s; and the Black experience in contemporary America. Field trips may be required outside of regularly scheduled class times. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

### ETHS 150 F Introduction to Chicana-o Studies (formerly ETHS 140 F)

**3 Units**

54 hours lecture per term. This course is an introduction to the field of Chicana/o Studies. It is designed to acquaint students with the most significant social, political, economic, and historical aspects of the Chicana/o experience in the United States. As such, the course is interdisciplinary in nature and critically analyzes the societal context in which Chicanas/os have sought to maintain their culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

### ETHS 151 F Chicana/o History I (formerly ETHS 141 F)

**3 Units**

54 hours lecture per term. This course is a survey of the Chicana/o experience from the Mesoamerican era to the Mexican American War. Topics covered include: Mesoamerican civilizations, Spanish conquest and settlement in the Americas, the African influence in New Spain, mestizaje and racial identity, life in the Spanish and Mexican borderlands pre- and post-Mexican Independence, and the Mexican American War. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### ETHS 152 F Chicana-o History II (formerly ETHS 141 F)

**3 Units**

54 hours lecture per term. This course is a survey of the Chicana/o experience from the Mexican American War to the present. Topics covered include: the impact of the Mexican American War on the lives of Mexicans in the American Southwest, immigration, labor struggles, racial discrimination, the struggles for civil rights and social justice in the 19th and 20th centuries, the construction of a "Chicana/o" identity and the Chicano experience in contemporary America. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC



**ETHS 153 F Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F) 3 Units**

54 hours lecture per term. This course focuses on the contemporary issues, major characteristics, and significant contributions of Chicana/o and Latina/o communities in the United States. An interdisciplinary approach will be used to examine areas including, but not limited to, art and culture, education, law, politics, religion, economics, and the family. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 153HF Honors Chicana-o and Latina-o Contemporary Issues 3 Units**

54 hours lecture per term. This Honors-enhanced course focuses on the contemporary issues, major characteristics, and significant contributions of Chicana/o and Latina/o communities in the United States. An interdisciplinary approach will be used to examine areas including, but not limited to, art and culture, education, law, politics, religion, economics and the family. Some field study and research may be required to provide relevant experiences. This course fulfills Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 159 F Introduction to American Indian Studies 3 Units**

54 hours lecture per term. This course is an introduction to the interdisciplinary field of American Indian Studies. It is designed to acquaint students with the most significant social, political, religious, and artistic aspects of various Indigenous peoples of North America within a transnational context, focusing on the twentieth century to the present. Students will critically analyze topics including Native philosophy and religious traditions, settler colonialism, urbanization, intertribal relations, identity, gender and sexuality, art, literature, and cultural production, environmental justice, and the context in which Indigenous peoples have sought to maintain their sovereignty. Students may be required to attend a relevant academic conference or community event as part of the course. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 160 F American Indian History (formerly History of the Native Americans) 3 Units**

54 hours lecture per term. This course is a historical survey of the Native American experience from creation to the present. Topics covered include civilizations across North America; Native world views and religious traditions; conquest and settler colonialism; analysis of political, cultural, economic, legal and military relationships that developed between American Indians and foreign nations; and the long historical struggle for tribal sovereignty. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit), AA GE, CSU GE, IGETC

**ETHS 170 F Introduction to Asian Pacific Islander American Studies 3 Units**

54 hours lecture per term. This course is an interdisciplinary field of study that explores historical and contemporary Asian/Pacific Islander American political, social, and cultural practices and experiences in the United States. This course examines the foundations and theories of Asian/Pacific Islander American Studies and its contemporary approaches to the study of APIA peoples. Through a thematic approach that will allow us to understand diverse communities in relation to each other, emphasis is placed on the transnational and transpacific considerations of race, ethnicity, (im)migration, gender, sexuality, and class as it relates to API communities. Through the use of academic and community-based scholarship, contemporary themes includes imperialism and colonization, militarization and occupations, social movements and activism, and visual and performing arts. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 171 F Asian Pacific Islander American History 3 Units**

54 hours lecture per term. This course is a historical survey of the Asian Pacific Islander American experience in the United States focusing on the 19th and 20th centuries. Various communities will be examined including Chinese, Japanese, Korean, Native Hawaiian, Filipino, Samoan, South Asian, and Southeast Asian. Students will explore topics ranging from US imperialism, intervention, and foreign policy; Orientalism and anti-Asian racism; (im)migration, exclusion, and settlement patterns; labor and the economy; identity, community formation, and struggles for civil rights and social justice. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ETHS 199 F Ethnic Studies Independent Study 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students must contact the supervising instructor to develop a learning contract for their particular research topic. Students who successfully complete this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required.)

**ETHS 202 F Race, Ethnicity and Pop Culture 3 Units**

54 hours lecture per term. This course examines the contributions of people of color in film and popular culture and surveys the cultural, economic, social, and political forces that shape their representations in media. In this course, students will analyze representations of race, gender, and sexuality in US film, television, and new media utilizing ethnic studies theoretical frameworks and methods including queer of color critique, women of color feminisms, aesthetics, performance studies, cultural studies, and new media studies. Popular culture and independent productions are analyzed to understand how media representations reproduce and contest contemporary articulations of racialized, gendered, and sexualized experiences and social norms within contemporary society. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 235 F Contemporary Social Justice Movements 3 Units**

54 hours lecture per term. This course is an examination of the Post-World War II movements for social justice among people of color in the United States. It analyzes the socio-historical factors that led to struggles for racial, gender, economic, educational, and environmental justice while comparing their strategies and outcomes. Topics covered include a history of early civil rights movements, radical power movements of the 1960s, and contemporary issues and movements that seek to eradicate racism, classism, sexism, and homophobia in the United States and around the world. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

**ETHS 235HF Honors Contemporary Social Justice 3 Units**

54 hours lecture per term. This Honors-enhanced course is an examination of the Post-World War II movements for social justice among people of color in the United States. It analyzes the socio-historical factors that led to struggles for racial, gender, economic, educational, and environmental justice while comparing their strategies and outcomes. Topics covered include a history of early civil rights movements, radical power movements of the 1960's, and contemporary issues and movements that seek to eradicate racism, classism, sexism, and homophobia in the United States and around the world. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

**ETHS 299 F Ethnic Studies Advanced Independent Study 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students must contact the supervising instructor to develop a learning contract for their particular research topic. Students who successfully complete this course will be awarded elective credit in the Social Services area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required.)

## Fashion (FASH)

**FASH 010 F Clothing Construction Studio 1 Unit**

**Corequisite(s):** FASH 101 F with a grade of C or better. Pass/No Pass only. 54 hours lab per term. This course provides supervised open lab time for students to develop clothing construction, patternmaking and design skills by working on individualized projects.

**FASH 045 F Swim and Active Wear 2 Units**

**Prerequisite(s):** FASH 101 F with a grade of Pass. 18 hours lecture and 54 hours lab per term. In this course, students will learn the techniques needed to create commercial quality swimwear and active wear using both industrial and home sewing equipment by apparel industry techniques. (Degree Credit)

**FASH 050 F Careers in Fashion 1 Unit**

Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course is an introduction to a variety of career opportunities in designing or creating clothing. Personal qualities and skills needed for various career choices as well as the responsibilities, tools, and working environment will be covered for retailing, apparel manufacturing, couture, wardrobe consulting, theatrical, and entrepreneurial fields. (Degree Credit)

**FASH 060 F Professional Image 2 Units**

Letter Grade or Pass/No Pass option. 36 hours lecture per term. This course will teach students the skills needed to get a job, develop a strong work ethic, become a valuable employee, and how to dress in a professional manner. The subject areas covered are: time management, goal setting, interview skills, wardrobe planning, personal appearance for men and women, developing skills to work well with others, problem solving, professional etiquette, and self-promotion. (Degree Credit)

**FASH 082 F Beginning Designing and Sewing Leather (formerly FASH 080AF) 2 Units**

**Prerequisite(s):** FASH 201 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course, the students will learn the skills and techniques needed to design and sew fashionable apparel and accessories of leather and suede.

**FASH 085 F Bridal and Special Occasion Wear 2 Units**

**Prerequisite(s):** FASH 201 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course covers specialized advanced construction techniques used in the manipulation of special and veil fabrics. The construction of advanced under-support techniques for bridal and special occasion wear will be discussed. The resources for these fabrics, notions and embellishments used in the assembly of special occasion wear will also be included. (Degree Credit)

**FASH 088 F CAD for Apparel 2 Units**

**Prerequisite(s):** FASH 186 F and FASH 284 F, with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course, students will use computer aided design (CAD) software as used in the fashion industry. The development of technical packages including garment construction specs, design and fashion illustrating (Degree Credit)

**FASH 090 F Creative Serging - Overlock Machine 2 Units**

18 hours lecture and 54 hours lab per term. This course will cover basic operation, care and use of serger machines. Students will learn about the various types, features, accessories, tools and notions necessary for applications in constructing serged projects. (Degree Credit)

**FASH 093 F Pattern Alteration and Fitting 2 Units**

18 hours lecture and 54 hours lab per term. In this course, the students will learn how to alter ready-made garments. The students will analyze properly and improperly fitted garments. This course provides instruction on altering commercial patterns to body measurements and making basic patterns to be used as basic blocks for adjusting styles and designing clothing.

**FASH 096 F Exploring a Fashion E-Commerce Home-Based Business (formerly Exploring a Home-Based Business) 2 Units**

36 hours lecture per term. This course explores the feasibility of using skills to produce income at home, and investigates the organization and management needed for a home-based business. Personal, financial, and management considerations are included. (Degree Credit)

**FASH 101 F Basic Sewing Techniques (formerly Clothing I) 2 Units**

Pass/No Pass only. 18 hours lecture and 54 hours lab per term. This course is designed for the beginning sewer. Basic clothing construction techniques used in the apparel industry. Appropriate methods for quality construction using a variety of fabrics. This course will include custom and speed techniques for developing skills in clothing construction, various techniques for obtaining perfect fit of a garment plus professional methods for constructing clothes. (CSU) (Degree Credit)

- FASH 107 F Apparel Analysis** **3 Units**  
54 hours lecture per term. This course will study the psychological and sociological significance of clothing and apply the principles and elements of design in the selection of clothing to enhance the individual. (CSU) (Degree Credit)
- FASH 108 F Flat Pattern Methods and Design I (formerly FASH 108AF)** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, students will learn to design and make garments by apparel industry techniques by manipulating paper patterns, thereby translating a designers sketch or concept into a marketable garment. (CSU) (Degree Credit)
- FASH 109 F Flat Pattern Methods and Design II (formerly FASH 108BF)** **2 Units**  
*Prerequisite(s):* FASH 108 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course, students will make patterns for apparel using basic techniques learned in FASH 108 F and adding more advanced concepts for creating wearable clothing. (CSU) (Degree Credit)
- FASH 110 F Flat Pattern Methods and Design III (formerly FASH 108CF)** **2 Units**  
*Prerequisite(s):* FASH 109 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course will cover the development of patterns on the computer for fashion forward apparel using techniques learned in FASH 109 F, adding more advanced concepts. (CSU) (Degree Credit)
- FASH 145 F Field Studies in Fashion** **1 Unit**  
18 hours lecture per term. This course will acquaint students with the world of fashion through field trips to manufacturers, designers, the wholesale mart, and retail store, museum, or trade publication, different types of retail stores, museums, fashion publications and fashion shows. (CSU) (Degree Credit)
- FASH 150 F Introduction to the Fashion Industry** **3 Units**  
54 hours lecture per term. This course explores four levels of the fashion industry including the development of fashion, fashion designers, apparel producers, retailers, and fiber and fabric producers. (CSU) (Degree Credit)
- FASH 152 F Ready-to-Wear Evaluation** **3 Units**  
54 hours lecture per term. This course focuses on analyzing and evaluating the construction, appearance, pricing, sizing and fit of ready-to-wear and of price and quality indicators for selected accessories. Terminology associated with construction, production, and apparel styles will be included. (Degree Credit) (CSU)
- FASH 183 F Fashion Marketing** **3 Units**  
*Prerequisite(s):* FASH 150 F with a grade of C or better.  
54 hours lecture per term. This course will cover the principles behind consumer buying habits. Emphasis is placed on understanding consumer behavior as it relates to the marketing concept of the retailer. (CSU) (Degree Credit)
- FASH 186 F Workroom Sketching** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, the students will learn drawing techniques for garment workroom sketches. Included will be emphasis on developing skills in sketching garments with complete seam and embellishment details in the desired scale for use in the workroom of a manufacturer or custom shop. Drawing ability not necessary.
- FASH 188 F Apparel Production** **2 Units**  
*Prerequisite(s):* FASH 050 F and FASH 108 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. In this course, students will learn to become familiar with one of the major segments of the fashion industry. By learning the manufacturing sequence and production of pattern layout, cutting techniques, operating power machines, quality control, sorting, labeling, costing, and sourcing students will be prepared for a job as a production assistant of a design room assistant in an apparel factory. (CSU) (Degree Credit)
- FASH 190 F Pattern Grading** **2 Units**  
*Prerequisite(s):* FASH 108 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course teaches students to "size up" and "size down" a fashion pattern for all size ranges in misses, women's, junior, children, and men's wear using commercial industry techniques.
- FASH 196 F Domestic and International Fashion Studies** **2.5 Units**  
Pass/No Pass only. 45 hours lecture and 9 hours lab per term. This course is designed to introduce the domestic and international fashion industry to the student of American fashion. Class members will tour selected fashion manufacturers, textile mills, museums, and leading department stores in Europe, typical shops, and museums in the U.S. This course offers specialized sightseeing to the cultural centers of the host cities. (CSU) (Degree Credit)
- FASH 199 F Fashion Independent Study** **1 or 2 Units**  
54-108 hours of independent study per term. This course is designed for advanced students who wish to increase their knowledge of fashion through individual study. Projects must have instructor approval prior to enrollment. At the completion of the project, a written report is required. Students will schedule conferences with the instructor. (CSU) (UC review required.) (Degree Credit)
- FASH 201 F Fashion Sewing (formerly Clothing II)** **2 Units**  
*Prerequisite(s):* FASH 101 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course develops the development of intermediate skills in clothing construction. Included in this course is custom couture techniques, the use of special fabrics such as plaids, lace, sheers, and pile fabrics. Methods of individualizing clothing with structural and applied designs such as piping, quilting and applique explored. (CSU) (Degree Credit)
- FASH 202 F Display and Visual Merchandising (formerly Visual Merchandising)** **2 Units**  
18 hours lecture and 54 hours lab per term. This course covers the role of display merchandising principles and design principles that are used to create retail displays. The care and handling of equipment will be discussed and demonstrated. Students will practice display techniques with windows and showcases and learn to develop a visual merchandising presentation. (CSU) (Degree Credit)
- FASH 205 F Tailoring (formerly FASH 205AF)** **2 Units**  
*Prerequisite(s):* FASH 201 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course presents contemporary and traditional custom tailoring techniques and industry techniques for producing women's and men's tailored garments such as suits and coats. Student constructs a line jacket or coat. (CSU) (Degree Credit)

- FASH 206 F Textiles** **4 Units**  
54 hours lecture and 54 hours lab per term. This course surveys and studies fabrics used in clothing and interior design. It covers the study of fibers from production through fabric manufacturing and finishing. Emphasis is placed on performance use, care, and suitability for various end uses. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- FASH 209 F Draping (formerly FASH 209AF)** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, students will learn to manipulate fabrics on a dress form to create designs without the use of drafter pattern. An exploration of the many possibilities of draping will be made using a variety of fabrics. (CSU) (Degree Credit)
- FASH 211 F Draping - Advanced (formerly FASH 209BF)** **2 Units**  
**Prerequisite(s):** FASH 209 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course, students will learn advanced techniques on the manipulation of fabrics on a dress form to create designs without the use of drafted pattern. An exploration of the many possibilities of advanced draping will be made using a variety of fabrics. (CSU) (Degree Credit)
- FASH 220 F Retail and Fashion Buying** **3 Units**  
54 hours lecture per term. This course offers a study of the principles of merchandise buying for resale in independent stores, major department stores, chain stores and centralized buying. This course will cover retail-buying principles for fashion merchandise, staples and soft merchandise lines. The lecture topics covered are: consumer motivation, merchandise planning and selection, sourcing, legal and trade regulation pricing, vendor relations, pricing analysis, classification systems, merchandise management and control, plus career opportunities. Field trips may be required outside of class times. (Degree Credit) (CSU)
- FASH 221 F Advanced Retail and Fashion Buying** **3 Units**  
**Prerequisite(s):** FASH 220 F with a grade of C or better  
54 hours lecture per term. This course will prepare students in advanced concepts and principles of buying and merchandising fashion goods. This course expands on retail merchandising calculations and analysis for fashion apparel buying. (CSU) (Degree Credit)
- FASH 240 F Introduction to Fashion Styling and Current Topics in Fashion** **2 Units**  
**Prerequisite(s):** FASH 150 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This introduction course covers fashion styling, current topics related to fashion, fashion social media, communication, public relations, journalism, photography, current topics and make-up. This course will explore all of these subjects and how they are linked to creating an image and ultimately selling fashion. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- FASH 242 F Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)** **3 Units**  
54 hours lecture per term. This course surveys the evolution of western and non-western clothing styles as a reflection of culture throughout history from Egyptian to Contemporary periods. Emphasis is placed on the relation of recurring styles to contemporary fashion; and the effect of socio-psychological, economic and political/religious influences on dress in historical perspective. (CSU) (Degree Credit)
- FASH 244 F Ethnic Costume** **3 Units**  
Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course is a survey of clothing worn as the national dress and daily wear of the indigenous peoples and the apparel of religious cultures in the developed and underdeveloped areas of the world and in the United States. Emphasis is on its influence on contemporary clothing. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) AA GE
- FASH 250 F Fashion Promotion** **3 Units**  
**Prerequisite(s):** FASH 150 F with a grade of C or better.  
54 hours lecture per term. This course provides an analysis of sales promotion activities of fashion retailers and manufacturers. Topics include marketing communications, promotional strategies, fashion show production, and special event planning for promotion that leads to sales. (CSU) (Degree Credit)
- FASH 255 F Advanced Clothing Construction - Industrial** **2 Units**  
**Prerequisite(s):** FASH 101 F and FASH 201 F, with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course is an advanced course of sewing clothing construction methods. Emphasis is on industrial equipment used in the mass production of sample garments. In this course, the student will produce sample garments using industrial construction methods while working on industrial equipment. Included is overlock, buttonhole and cover stitch machines; the use and care. (CSU) (Degree Credit)
- FASH 260 F Fashion Forecasting** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, the students will study the techniques and procedures for identifying and forecasting current fashion trends. Students will learn to understand the role of the fashion forecaster and how to detect those trends which may look to make another appearance, as well as any new trends which may be about to emerge. Included in this course will be the viewing of trend forecasting services. (CSU) (Degree Credit)
- FASH 284 F Fashion Design (formerly FASH 284AF)** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, students will learn the application of design principles and elements to contemporary fashion for ready-to-wear and couture and how to make it marketable. Class work will require garment sketching. Current fashion trends and resources for design ideas will be explored. (CSU) (Degree Credit)
- FASH 285 F Fashion Design - Advanced (formerly FASH 284BF)** **2 Units**  
**Prerequisite(s):** FASH 284 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course explores the design principles and elements to contemporary fashion. The lectures cover design problems encountered in the ready-to-wear and couture garment industries. Classwork will require garment sketching. Current fashion trends, sourcing and resources for design ideas will be explored. (CSU) (Degree Credit)
- FASH 288 F Advanced CAD for Apparel-Fashion Illustration and Digital Flats** **2 Units**  
**Prerequisite(s):** FASH 088 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course, students will apply advanced applications of fashion illustration and technical flat techniques using Adobe Illustrator. This course includes fabric and textile rendering, repeats, graphic placements, patterns and design details. A variety of computer word processing frequently used in the fashion industry. Microsoft Word, Excel, In Design and Adobe Photoshop will be explored. (CSU) (Degree Credit)

**FASH 297 F Fashion Design Portfolio** **2 Units**  
**Prerequisite(s):** FASH 088 F, FASH 108 F, FASH 109 F, FASH 209 F and FASH 284 F with a grade of C or better

18 hours lecture and 54 hours lab per term. In this course, students will learn to develop a design portfolio. Students will develop and refine their individual style by the development of a fashion portfolio containing original design work, fashion illustrations, flats and photographs. Included are look books and digital portfolio using various media. (CSU) (Degree Credit)

**FASH 299 F Fashion Industry Internship** **2-4 Units**  
**Prerequisite(s):** For Design Majors: FASH 109 F and FASH 209 F and FASH 284 F, with a grade of C or better OR for Merchandise Majors: FASH 150 F and FASH 220 F and FASH 250 F, with a grade of C or better.

18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through internships/employment in with a garment manufacturer or retailer or one of the related businesses in the fashion industry. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (Degree Credit) (CSU)

**FASH 975 F Patternmaking: Collections** **2 Units**  
**Prerequisite(s):** FASH 108 F and FASH 109 F and FASH 209 F and FASH 284 F, with a grade of C or better

18 hours lecture and 54 hours lab per term. In this course, students will make patterns for apparel using basic will apply design principles to contemporary fashion by designing and producing a group of coordinated garments which will be included in a runway fashion show or digital look book. Field trips may be required outside of class time. (Degree Credit)

**FASH 976 F Men's Patternmaking** **2 Units**  
**Prerequisite(s):** FASH 108 F with a grade of C or better.

18 hours lecture and 54 hours lab per term. In this course, students will make patterns for men's apparel using basic blocks. The students will apply design principles to contemporary fashion by creating men's patterns and producing a group of men's coordinated garments which will be included in a runway fashion show, digital look book or fashion event. (Degree Credit)

## Foods (FOOD)

**FOOD 102 F Introduction to Foods (formerly FOOD 101AF)** **3 Units**

36 hours lecture and 54 hours lab per term. This course is designed to provide the student with knowledge of the fundamental scientific principles involved in food preparation, as well as practical experience in applying these principles to a wide variety of foods representative of those consumed in the U.S. Emphasis is placed on developing skills in utilizing appropriate basic scientific methodology to study the components of food and food products; and on acquiring a knowledge of, as well as applying, generally-accepted quality standards to such foods and food products. (Degree Credit) (CSU) (C-ID: NUTR 120)

**FOOD 110 F Food Safety and Sanitation** **3 Units**

54 hours lecture per term. In this course, students will examine basic principles of food safety and sanitation applied in the food service industry to comply with state regulations. Emphasis is placed on cause and control of foodborne illnesses, personal hygiene, food processing and storage methods, general safety regulations and accident prevention. National food handler or manager certification exam will be given. (Degree Credit) (CSU)

**FOOD 130 F Cultural Aspects of Food** **3 Units**

36 hours lecture and 54 hours lab per term. This course examines food as an expression of cultural unity and diversity. Students will investigate the many cultural influences on food choices and patterns. Preparation techniques and products from a variety of traditions as practiced in the United States will be explored. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU)

**FOOD 160 F Foods for Fitness (formerly FOOD 060 F)** **2 Units**

18 hours lecture and 54 hours lab per term. This course presents nutrition information to enhance knowledge about food choices. The principles of nutrition and food preparation are presented in a non-technical format. Students are able to apply new knowledge to their personal fitness, diet, and health goals. Labs include the planning and preparation of foods which are emphasized in the current Dietary Guidelines for Americans. (Degree Credit) (CSU)

**FOOD 170 F Vegetarian Cooking and Nutrition (formerly FOOD 070 F)** **2 Units**

18 hours lecture and 54 hours lab per term. This course is designed to develop a basic understanding of the vegetarian diet with practical applications in food preparation. Emphasis will be on the practical preparation of health-promoting food for the lacto, lacto-ovo vegetarian and vegan. (Degree Credit) (CSU)

## French (FREN)

**FREN 101 F Elementary French I** **5 Units**

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of French-speaking countries. This course is conducted primarily in French and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**FREN 102 F Elementary French II** **5 Units**

**Prerequisite(s):** FREN 101 F or one year of high school French with a grade of C or better.

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of French-speaking countries. This course is conducted primarily in French and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**FREN 200 F Conversational French** **2 Units**

**Prerequisite(s):** FREN 102 F with a grade of C or better or Pass or two years of high school French with a grade of C or better  
 36 hours lecture per term. This course will focus on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components are included. This course may be taken concurrently with FREN 203 F or FREN 204 F. This course will be conducted entirely in French. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**FREN 203 F Intermediate French III****4 Units**

**Prerequisite(s):** FREN 102 F with a grade of C or better or Pass or two years of high school French with a grade of C or better  
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing French based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**FREN 204 F Intermediate French IV****4 Units**

**Prerequisite(s):** FREN 203 F with a grade of Pass or C or better or three years of high school French with a grade of C or better  
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing French based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of French culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**Faculty**

Catherine Reinhardt-Zacair

**Geography (GEOG)****GEOG 100 F Global Geography****3 Units**

54 hours lecture per term. This course is a survey of the world's geographical regions. It explores basic geographical concepts, human and physical spatial patterns, and contemporary social and environmental issues at the global and regional scales. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: GEOG 125)

**GEOG 100HF Honors Global Geography****3 Units**

54 hours lecture per term. This Honors-enhanced course is an overview to the world's geographical regions and an introduction to basic geographical concepts, as well as human and physical spatial patterns. The nature of global geography includes population dynamics and the social, political and economic organization of space. Field trips may be taken outside of regularly-scheduled class time. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 125)

**GEOG 102 F Physical Geography****3 Units**

54 hours lecture per term. This course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. Field trips may be taken outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 110)

**GEOG 102HF Honors Physical Geography****3 Units**

54 hours lecture per term. This Honors-enhanced course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. Field trips may be taken outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 110)

**GEOG 102LF Physical Geography Laboratory****1 Unit**

**Corequisite(s):** GEOG 102 F or GEOG 102HF with a grade of C or better.  
54 hours lab per term. This lab/field study supplements GEOG 102 F. This course examines the processes of weather and climate, the construction/destruction of the earth's land surface focusing on internal and external forces, and the evolution of associated flora and fauna. This course will emphasize the understanding of the spatial distributions of the earth's physical characteristics and the relative importance of natural and human-induced environmental changes such as global warming, human land use and resources acquisition, and the transformation and creation of human environments. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOG 111)

**GEOG 120 F Global Environmental Problems****3 Units**

54 hours lecture per term. This course is a geographical evaluation of the causes and consequences of global environmental problems. The focus is on the spatial dimensions of global environmental crises as they relate to social, political and economic issues. Topics examine the historical evolution of environmental issues including population growth, agriculture, climate change, land-use, urbanization, endangered species, and sustainable development. Field trips outside of regularly-scheduled class time may be required. (CSU) (UC) (Degree Credit), AA GE, CSU GE, IGETC

**GEOG 130 F California Geography****3 Units**

54 hours lecture per term. This course investigates and interprets the physical, cultural and economic bases and regions of the state of California. Particular emphasis is placed upon the natural foundations of the landscapes with the exploration of the unique nature and special characteristics of the people utilizing that landscape. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: 140)

**GEOG 160 F Cultural Geography****3 Units**

54 hours lecture per term. This course provides a study of variations in the world's cultural landscapes, focusing on spatial patterns of population growth and distribution, settlement and livelihoods in the context of social, religious and political belief systems. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 120)

**GEOG 199 F Geography Independent Study****1 Unit**

54 hours independent study per term. This course is for students who wish to expand and deepen their knowledge and understanding of geographic concepts, topics, themes and ideas. (Degree Credit) (CSU) (UC)

**GEOG 230 F Introduction to Geographic Information Systems (formerly GEOG 281AF) 3 Units**

36 hours lecture and 54 hours lab per term. This course provides an introduction to concepts and use of Geographic Information Systems (GIS), and its role in geographic analysis and decision making. This course will include an introduction to basic cartographic principles, maps, scales, coordinate systems and map projections. Varied applications and examples of GIS technology used in the social sciences, governmental agencies, environmental science and business and industry will be presented. Specific topics and skills taught will include an understanding of GIS terminology, raster and vector data structures, data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial databases, including map features and attribute tables, and spatial analysis using map overlays, buffers, and networks. (Degree Credit) (CSU) (C-ID: GEOG 155)

**GEOG 262 F Economic Geography 3 Units**

54 hours lecture per term. This course is an investigation and interpretation of the world's economic organization, its natural resources, raw materials, crops and crop production, manufacturing and service industries, new trends in producing and the changing centers of production and consumption. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

## German (GERM)

**GERM 101 F Elementary German I 5 Units**

90 hours per lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of German-speaking countries. This course is conducted primarily in German and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE

**GERM 102 F Elementary German II 5 Units**

**Prerequisite(s):** GERM 101 F with a grade of C or better or Pass or one year of high school German with a grade of C or better  
90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of German-speaking countries. This course is conducted primarily in German and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**GERM 200 F Conversational German 2 Units**

**Prerequisite(s):** GERM 102 F with a grade of C or better or Pass or two years of high school German with a grade of C or better  
36 hours lecture per term. This course will focus on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components will be included. This course may be taken concurrently with GERM 203 F or 204 F. Instruction will be conducted entirely in German. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**GERM 203 F Intermediate German III 4 Units**

**Prerequisite(s):** GERM 102 F with a grade of Pass or C or better or two years of high school German with a grade of C or better  
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing German based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**GERM 204 F Intermediate German IV 4 Units**

**Prerequisite(s):** GERM 203 F with a grade of C or better or Pass or three years of high school German with a grade of C or better  
72 hours of lecture per term. This course continues the development of listening and reading comprehension, speaking and writing German based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding of German culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

## Faculty

Klaus Hornell

## Health Education (HED)

**HED 140 F Health Science 3 Units**

54 hours lecture per term. This course provides an overview of personal and public health concepts with an emphasis on scientific inquiry. Lecture and discussion topics include personal responsibility, mental health, nutrition, weight control, exercise, sexuality, relationships, immunity, addiction, current public health problems and health care services. Basic concepts will be presented from a holistic perspective to inform students of health issues which affect their individual lives and society. (Degree Credit) (CSU) (UC) AA GE, CSU GE

## Faculty

David Dorado

## History (HIST)

**HIST 110 F Western Civilizations to 1550 (formerly Western Civilization I) 3 Units**

54 hours lecture per term. This course is a study of western civilization from prehistoric times through the 16th century, e.g., Mesopotamian, Egyptian, Hebrew, Greek, Roman, Byzantine, Muslim, Medieval, Renaissance and Reformation societies. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 170)

**HIST 110HF Honors Western Civilizations to 1550 (formerly Western Civilization II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a study of western civilization from prehistoric times through the sixteenth century, e.g., Mesopotamian, Egyptian, Hebrew, Greek, Roman, Byzantine, Muslim, Medieval, Renaissance and Reformation societies. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 170)

**HIST 111 F Western Civilizations Since 1550 (formerly Western Civilization II) 3 Units**

54 hours lecture per term. This course is an examination of Western civilizations from the sixteenth century to the present, including the development of modern society, arts, industry, human rights, democracy, warfare, and political and economic systems. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 180)

**HIST 111HF Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a continuation of HIST 110 or 110HF Western civilizations. It is a study of the development of western civilizations from the sixteenth century to the present day, emphasizing the political, economic, religious, social, and cultural forces at work in the various geographic areas. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 180)

**HIST 112 F World Civilizations to 1550 (formerly World Civilizations I) 3 Units**

54 hours lecture per term. This course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from earliest times to about 1550. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 150)

**HIST 112HF Honors World Civilizations to 1550 (formerly Honors World Civilizations I) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of the development and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from the earliest times to AD 1550. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 150)

**HIST 113 F World Civilizations Since 1550 (formerly World Civilizations II) 3 Units**

54 hours lecture per term. This course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from CE 1550 to the present. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 160)

**HIST 113HF Honors World Civilizations Since 1550 (formerly Honors World Civilizations II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from AD 1550 to the present. This Honors-enhanced course will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 160)

**HIST 127 F Survey of United States History (formerly Survey of American History) 3 Units**

54 hours lecture per term. This course is a survey of U.S. history from the colonial foundations to the present time. It covers major changes in society; politics, economics and culture throughout the history of the United States. Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 151 F Survey of British History I 3 Units**

54 hours lecture per term. This course is a survey of British history from prehistoric times to 1714 and emphasizes the contributions of Celts, Romans, Anglo-Saxons and Normans; the structure of society; the growth of monarchy, Common Law, Parliament and other governmental institutions; the development of architecture and literature; the role of the Church; and transformations brought by Reformation and Revolution during the Tudor-Stuart period. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 152 F Survey of British History II 3 Units**

54 hours lecture per term. This course is a survey of British history from 1714 to the present, emphasizing the role of prime ministers as well as monarchs; the development of foreign policy and naval power; the evolution of science, religion, education, literature, painting and architecture; the changes brought about by industrialization and two World Wars; the growth of the welfare state and the rise and fall of the British empire. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 154 F Ancient Egypt 3 Units**

54 hours lecture per term. This course surveys Egyptian politics, economy, society, religion, and the arts from the Pre-dynastic period through Cleopatra. It also investigates Egypt's connections with neighboring cultures of Africa, the Mediterranean, and the Middle East. An introduction to hieroglyphs is included. This course fulfills the Multicultural Education Requirement for graduation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 160 F Asian Civilizations I (formerly HIST 160AF) 3 Units**

54 hours lecture per term. This course is a study of the historical developments of Asia's three great civilizations up to the 1800's. Concentration will be on the traditional institutions shaped by the religious and philosophical concepts of these civilizations. Certain concepts in Hinduism, Buddhism, Confucianism, Taoism, and Shintoism will be studied as they affected major Asian historical developments. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 161 F Asian Civilizations II (formerly HIST 160BF) 3 Units**

54 hours lecture per term. This course is a study of the revolutionary changes that have taken place in basic Asian traditions and institutions. Focus will be on the efforts to replace traditional institutions with something "modern" in response to the coming of the West to Asia and to the challenge of Western ideas. Examination will be made of the impact of such concepts as capitalism, democracy, imperialism, nationalism, and communism on the traditional culture of these countries. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 165 F Introduction to the Middle East 3 Units**

54 hours lecture per term. This course examines the historical development of the Middle East from the prophet Mohammed to the present, emphasizing the Islamic religion, art, philosophy, as well as key political and social conflicts of modern times. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 165HF Honors Introduction to the Middle East 3 Units**

54 hours lecture per term. This Honors-enhanced course is a historical development of the Middle East from the prophet Mohammed to the present, emphasizing Islamic religion, art, philosophy, and key political and social conflicts of modern times. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC



**HIST 170 F History of the United States to 1877 (formerly History of the United States I) 3 Units**

54 hours lecture per term. This course is a survey of U.S. history from the colonial era to 1877, and examines the diversity of cultures during this period. Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) AA GE, CSU GE, IGETC (C-ID: HIST 130)

**HIST 170HF Honors History of the United States to 1877 (formerly Honors History of the United States I) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of U.S. history from the colonial era to 1877, examining the diversity of cultures during this period. (CSU) (UC Credit Limitation) Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) AA GE, CSU GE, IGETC (C-ID: HIST 130)

**HIST 171 F History of the United States Since 1877 (formerly History of the United States II) 3 Units**

54 hours lecture per term. This course is a survey of American History from 1877 to the present, examining the diversity of American cultures during this period. (CSU) (UC Credit Limitation) Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit). AA GE, CSU GE, IGETC (C-ID: HIST 140)

**HIST 171HF Honors History of the United States Since 1877 (formerly Honors History of the United States II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of American history from 1877 to the present time, examining the diversity of American cultures during this period. Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: HIST 140)

**HIST 190 F History of the Americas I (formerly HIST 162AF) 3 Units**

54 hours lecture per term. This course is a survey of the history of the Western Hemisphere from its discovery to the wars of independence. Emphasis is placed upon the European inheritance, the interaction of this inheritance with the native and African cultures and the planting of colonial societies in the new world. Spanish America, Brazil, Canada, and the United States are compared as to their socio-cultural, economic, and political development during the colonial and independence periods. This course satisfies the state requirements in American History and Institutions. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 191 F History of the Americas II (formerly HIST 162BF) 3 Units**

54 hours lecture per term. This course is a comparative study of the political, social and economic development of the independent nations of the Western Hemisphere from the wars of independence to the present. Emphasis is placed upon present international relations of these nations. This course satisfies the State requirements in American History and Institutions. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 199 F History Independent Study 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area of history through individual research and study. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)

**HIST 270 F Women in United States History 3 Units**

54 hours lecture per term. This course focuses on women in American society from the Colonial era to the present with emphasis on the social sphere of women, women's health, and the roles of women in wartime and peace and in such movements as antebellum reform, suffrage and feminism as well as the gender specific problems for women in the United States. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 273 F United States Environmental History 3 Units**

54 hours per lecture term. This course surveys the environmental history of the United States from the earliest human migrations to the present day, focusing on the complex ways people have perceived, relied on, interacted with and been affected by the natural world. Topics include human interactions with land, water, plants, animals, and energy sources. The course considers the economic, political, social, cultural, technological and global aspects of these interactions. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**HIST 275 F History of California 3 Units**

54 hours lecture per term. This course is a geographical, ethnic, social, economic, intellectual, and political history of California from the earliest times to the present. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 299 F History Independent Study - Advanced 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area of history through individual research and study. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)

## Horticulture (HORT)

**HORT 001 F Principles of Horticulture I 4 Units**

54 hours lecture and 54 hours lab per term. This course covers the identification and use of ornamental plants; culture of landscape plants; morphology of leaves, flowers and fruits; survey of soil properties and fertilizers; safe and responsible use of pesticides and their alternatives; landscape design principles for basic horticulture skills in the gardening and nursery trades. (Degree Credit)

**HORT 002 F Principles of Horticulture II 4 Units**

54 hours lecture and 54 hours lab per term. This course covers plant propagation techniques, weed control for ornamental plantings, disease and pest control in the landscape and turf grass management techniques.

**HORT 005 F Basic Landscape Plants I 3 Units**

54 hours lecture per term. This course covers the identification and study of trees, shrubs, vines; tropical and herbaceous plant material of landscape value. Special emphasis is placed on fall-blooming as well as broadleaf and narrowleaf plants. This is course designed for non-majors, homeowners, and those engaged in the fields of landscaping and horticulture. Not open for transfer credit for majors in Ornamental Horticulture and Landscape Architecture as a substitute for HORT 160 F.

**HORT 006 F Basic Landscape Plants II 3 Units**

54 hours lecture per term. This course covers the identification and study of trees, shrubs, vines and herbaceous plant material of landscape value. Plants emphasized in this course include spring-blooming deciduous plants and additional plants not covered in HORT 005 F. This course is designed for non-majors, homeowners, and those engaged in the fields of landscaping and horticulture. This course is not transferable and cannot be used as a substitute for HORT 161 F in the Ornamental Horticulture or Nursery Management AS Degree.

**HORT 008AF Landscape Pruning Techniques****1 Unit**

18 hours lecture and 18 hours lab per term. This course covers the principles and practices used in pruning ornamental shrubs, trees, vines, herbaceous perennials, groundcovers and fruit trees found in residential and commercial landscapes. Special attention is given to appropriate plant use and maintenance. Field trips may be required outside of regularly scheduled class times. Pass/No Pass or Letter Grade option.

**HORT 008BF Basic Turf Care****1 Unit**

12 hours lecture and 18 hours lab per term. This course covers the fundamentals of lawn care for homeowners including planting, fertilization, irrigation, weed control, and pest control. Special techniques and equipment used for lawn renovation are also covered.

**HORT 008CF Home Pest Control****1 Unit**

12 hours lecture and 18 hours lab per term. This course covers the fundamentals of pest control for homeowners including identification and control of weeds, insects, vertebrates, arachnids, mollusks and diseases. Special emphasis is given to integrated Pest Management as a home pest control technique.

**HORT 010AF Landscape Lighting****1.5 Units**

18 hours lecture and 27 hours lab per term. This course covers the principles and practices used in lighting outdoor trees, shrubs, planter beds and living spaces. Emphasis is given to appropriate selection of code-approved low voltage electrical components, wiring and lighting fixtures for residential use.

**HORT 010BF Landscape Water Features****1.5 Units**

18 hours lecture and 27 hours lab per term. This course covers design and installation of landscape water features including ponds, garden streams, fountains and container water gardens. Students learn current construction techniques through an on-site installation.

**HORT 045 F Pest Control Certification and Safety****3 Units**

36 hours lecture per term. This course is designed to assist persons desiring to be licensed as Pest Control Advisors or Pest Control Operators of pesticide dealers. Instruction involves laws and regulations, pesticide safety, control of insects, mites, nematodes and other invertebrate pests, plant disease control, and plant growth regulators used in the landscaping business. California Department of Food and Agriculture continuing education hours are available for this course.

**HORT 046 F Pest Safety for Landscape Work****2 Units**

36 hours lecture per term. This course is designed to teach pesticide safety to Spanish and English-speaking landscape workers. Students learn safe operations of application equipment, pesticide toxicity ratings, methods of exposure and pesticide labeling along with information about pest and disease life cycle and post host relationships.

**HORT 058 F Irrigation Controller Programming****2 Units**

54 hours lecture and 54 hours lab per term. This course provides hands-on experience in which students will learn the fundamentals of programming irrigation controllers and the steps involved in programming some of the most popular irrigation controllers available in the industry. Practical situations will be used to show the applications of basic and advanced controller features. The course will also provide a review of various Central control computer irrigation systems. Three field trips will be scheduled to give students the opportunity to examine central control systems as water management tools in large commercial and recreational areas.

**HORT 070 F Volunteer Naturalist Training****2.5 Units**

36 hours lecture and 27 hours lab per term. This is a basic ecology course dealing specifically with the ecosystems represented in the wilderness parks and nature preserves of Orange County. Special emphasis will be placed on the natural history, geology and cultural history of our undeveloped areas. Training will also be given in the skills required to lead nature tours in the parks. Assumes no science background. Weekly field trips required.

**HORT 075 F Habitat Assessment and Restoration****2.5 Units**

36 hours lecture and 27 hours lab per term. This course is designed to introduce students to the ecological theory, and practical application of a variety of habitat assessment, restoration and monitoring techniques. Scientific, social and legal aspects of restoration will be discussed. Training will emphasize habitat evaluation and restoration techniques used by industry, government agencies and environmental organizations. Weekly field trips will visit and assist in assessment and restoration projects.

**HORT 152 F Applied Botany****4 Units**

54 hours lecture and 54 hours lab per term. This course includes the study of plant growth and development, horticultural practices, and an overview of horticulture as a science, an art and an industry. Practical exercises and field trips are part of the lab work. (Degree Credit) (CSU) AA GE, CSU GE

**HORT 153 F Landscape Irrigation****3 Units**

36 hours lecture and 54 hours lab per term. This course covers the principles and practices of installing basic irrigation systems. It includes the study of fittings, piping, valves, backflow preventers, controllers, and sprinklers; basic hydraulics, friction loss calculations and beginning irrigation design are also covered. (Degree Credit) (CSU)

**HORT 154 F Irrigation Design****3 Units**

**Prerequisite(s):** HORT 153 F with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course covers the principles and practices of designing and drawing plans for residential and small commercial irrigation systems. Includes the study of component selection, sprinkler spacing and location, hydraulic calculations, graphics presentations and current practices in producing professional quality irrigation design documents. (Degree Credit) (CSU)

**HORT 155 F Soils****3 Units**

36 hours lecture and 54 hours lab per term. This course covers the following physical, chemical, and biological properties of soils: formation, texture, structure, compaction, stability and drainage, permeability and water-holding capacity, soil reaction, ionic exchange, organic matter, soil classification, water conservation, and soil conservation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC)

**HORT 156 F Plant Nutrition****2 Units**

27 hours lecture and 27 hours lab per term. This course covers the composition, value and use of fertilizers, soil correctives and soil amendments. Methods and techniques employed in detailed fertility analysis and horticultural suitability of soil media. Application equipment and fertilizer injection techniques. (Degree Credit) (CSU)

**HORT 157 F Irrigation Principles****3 Units**

**Prerequisite(s):** HORT 153 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course covers the study and application of plant, soil and water relationships as they relate to irrigation. Sprinkler precipitation rates, soil infiltration rates and plant evapotranspiration rates are investigated to determine optimal irrigation, programming and efficient water usage. Lab hours will include field trips, laboratory investigations and on-site analysis. (Degree Credit) (CSU)

**HORT 158 F Landscape Irrigation Drip and Low Volume 3 Units**

36 hours lecture and 54 hours lab per term. This course covers the principles and practices of water conservation in landscapes by utilization of drip and low volume (low flow) irrigation systems. Special attention is given to system design, installation and operation of residential and commercial applications. (Degree Credit) (CSU)

**HORT 160 F Plant ID and Ornamental Trees 3 Units**

54 hours lecture per term. This course studies broadleaf and conifer trees used in California landscapes, with special emphasis on identification. Recommended as a transfer course for majors in horticulture and landscape architecture. (Degree Credit) (CSU) (UC Credit Limitation: HORT 160 F and HORT 161 F combined; maximum credit one course)

**HORT 161 F Plant ID/Ornamental Shrubs 3 Units**

54 hours lecture per term. This course covers the study of ornamental shrubs, ground covers, vines, tropical and herbaceous plant material used in California landscapes with special emphasis on identification. Recommended as a transfer course in the majors of horticulture and landscape architecture. (Degree Credit) (UC Credit Limitation)

**HORT 162 F Landscaping for Dry Climates 3 Units**

*Advisory:* HORT 200 F

36 hours lecture and 54 hours lab per term. This course covers the effects of Southern California environment on plant selection, knowledge of the growth requirements of selected native and exotic species, and their proper usage in landscapes. Emphasis is on functional values and aesthetic qualities of native and exotic drought-tolerant plants. Through development of the design process the student will create landscape plans and make site analysis evaluations using an inventory of appropriate native and drought-tolerant exotic species. Field trips are integrated as part of the laboratory projects, including one weekend trip which is required of all students. (Degree Credit) (CSU)

**HORT 164 F Plant Identification - Annuals, Perennials and Houseplants 3 Units**

54 hours lecture per term. This course covers the study of annuals, perennials, and houseplants used throughout California, with special emphasis on identification. It includes a comparison of the care requirements, culture and landscape usage for approximately 175 herbaceous ornamental plants. Recommended as a transfer course in the majors of horticulture and landscape architecture. (Degree Credit) (CSU)

**HORT 165 F Landscape Management 4 Units**

54 hours lecture and 54 hours lab per term. This course introduces students to the requirements for successfully managing maintenance aspects of landscapes. This course covers new plantings and maintenance of existing plantings, including pruning, fertilization, pest control, lawn care, and landscape estimating. (Degree Credit) (CSU)

**HORT 168 F Landscape Construction 3 Units**

54 hours lecture per term. This course covers the use and cost estimates of various landscape construction materials. Problems dealing with structure, grading, drainage, sprinklers, masonry, and electricity used in landscape construction. This course is designed for students qualifying for the State Landscape Contractors Examination. (Degree Credit) (CSU)

**HORT 169LF Landscape Construction Laboratory 1 Unit**

*Corequisite(s):* HORT 168 F with a grade of C or better.

54 hours lab per term. This course covers lab exercises in the use of wood, concrete, brick, blocks, and other materials of construction as they relate to structures, drainage, grading, utilities, and irrigation. (Degree Credit) (CSU)

**HORT 170 F Landscaping Contracting 3 Units**

54 hours lecture per term. This course covers the legal requirements and obligations of the landscape contractor, including contractor's law, lien rights, subcontractor regulations and employee labor law. It includes estimating and cost analysis for landscape trades. The course is directed toward preparing the student for passing the State Landscape Contractor's License Examination. (Degree Credit) (CSU)

**HORT 173 F Greenhouse and Nursery Production 3 Units**

36 hours lecture and 54 hours lab per term. This course presents current production methods used in producing greenhouse and nursery plants. Greenhouse and nursery facilities and equipment will be covered along with business practices, computer applications, nursery automation and current irrigation systems. This course is recommended for students seeking careers in nursery-related trades. (Degree Credit) (CSU)

**HORT 174 F Plant Propagation 3 Units**

36 hours lecture and 54 hours lab per term. This course covers the theoretical and commercial practices of plant propagation, including seeding and transplanting, preparation of cuttings, layering, division, budding and grafting, and micro propagation techniques. The use of plant hormones, plant physiology and genetic manipulation are discussed. (Degree Credit) (CSU)

**HORT 177 F Turf Grass Management 3 Units**

36 hours lecture and 54 hours lab per term. This course covers the management and pest control in turf grasses. Included are laboratory and field experience in the identification, planting, management practices, renovation, fertilization and pest management methods. This course is valuable to individuals entering fields of landscape management, nursery management and landscape architecture; also gold course managers, stadium and athletic field managers, park managers and managers of memorial parks. (Degree Credit) (CSU)

**HORT 185 F Arboriculture 2 Units**

18 hours lecture and 54 hours lab per term. This course covers current practices in maintaining trees through correct pruning, cabling and cavity repair. In addition, tree growth characteristics, local codes and regulations and safety practices related to pruning are covered. This course prepares students for the Certified Arborists examination. (Degree Credit) (CSU)

**HORT 188 F Integrated Pest Management 2 Units**

27 hours lecture and 27 hours lab per term. This course provides students with a fundamental knowledge of integrated pest management. During the class, students learn to develop and implement pest control programs using cultural, biological and chemical methods. Emphasis will be placed on pest identification, pest monitoring and analysis of plant symptoms. (Degree Credit) (CSU)

**HORT 200 F Landscape Design 3 Units**

36 hours lecture and 54 hours lab per term. This course covers basic drafting techniques combined with the principles of design leading to formal landscape drawings of homes. Includes the proper association of plant materials according to texture, color, mass, and cultural requirements. (Degree Credit) (CSU) (UC)

**HORT 201 F Advanced Landscape Design 3 Units**

**Prerequisite(s):** HORT 200 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course is a continuation of graphics, plant usage, and design theory covered in HORT 200 F with emphasis on hillside developments and commercial projects. A survey of historical development of landscape. Design of landscape structures (walls, patio overheads, steps, walkways, pools) with focus placed on the basic qualities of the construction materials. Elements of perspective drawings for project presentations. Detailed site analysis and evaluation of ecological factors. Field trips are part of laboratory, including one weekend trip required of all students. (Degree Credit) (CSU)

**HORT 205 F Applied Entomology 3 Units**

36 hours lecture and 54 hours lab per term. This course covers the principles of entomology including external anatomy and internal anatomy and physiology, insect relatives, and insect classification and identification. Concepts of insect pest management techniques will be included. An insect collection with proper identification to order and family will be required of all students with laboratory and field examination placing emphasis on identification and control. (Degree Credit) (CSU) AA GE, CSU GE

**HORT 207 F Plant Pathology 3 Units**

36 hours lecture and 54 hours lab per term. This course is an introductory study of the major plant diseases and their control. Fungi, bacteria, viruses, and nematodes causing diseases of economic crops throughout the U.S. are examined in the lab, greenhouse, and field. (Degree Credit) (CSU) AA GE, CSU GE

**HORT 215 F Diseases/Pests Ornament Plants 4 Units**

**Prerequisite(s):** HORT 205 F or HORT 207 F with a grade of C or better  
54 hours lecture and 54 hours lab per term. This course covers the diagnosis and control of parasitic and non-parasitic disease problems in ornamental landscapes. This course also involves determination of insects, mites, and other pest problems affecting ornamental plantings and the methods employed in control. Laboratory and field trips will be utilized to observe various problems in production areas. Transfer credit to colleges offering similar courses. (Degree Credit) (CSU)

**HORT 218 F Landscape Hydraulics 3 Units**

**Prerequisite(s):** HORT 153 F  
36 hours lecture and 54 hours lab per term. This course covers the principles of hydraulics related to open and closed piping systems, pipe and channel flow as applied to landscape irrigation and drainage system. It includes problems in water, storage, pumping system, surge and water hammer, fountains and ponds. (Degree Credit) (CSU)

**HORT 219 F CAD Applications in Horticulture 3 Units**

36 hours lecture and 54 hours lab per term. This course includes the use of computer aided drafting in the creation of landscape and irrigation designs. The use of symbol libraries, layered drawings, macros, and different drawing programs are included. Detail drawings, landscape and irrigation plans will be developed for actual site situations. (Degree Credit) (CSU)

**HORT 250 F Permaculture Design 5 Units**

72 hours lecture and 54 hours lab per term. This course introduces students to the application of ecological and environmental principles to designing human systems that are locally sustainable and require reduced inputs. Upon completion of this course with a passing grade, the student will receive a Permaculture Design Certificate, recognized worldwide. (Degree Credit) (CSU)

**HORT 255 F Hydroponics - Aquaponics 3 Units**

36 hours lecture and 54 hours lab per term. This course covers the principles and practices used in hydroponic and aquaponics systems. Special attention is given to system design and production of appropriate crops for small scale production. (Degree Credit) (CSU)

**HORT 257 F Soil Food Web 3 Units**

36 hours lecture and 54 hours lab per term. This course introduces students to the Soil Food Web. The Soil Food Web is a complex living system in the soil. This course examines soil organisms and their relationship to soil fertility. Methods will be explored to increase soil fertility using actively aerated compost teas. Quantitative and qualitative analysis of soil organisms through microscopy will be emphasized. (Degree Credit) (CSU)

**HORT 920 F Advanced CAD Applications in Horticulture 3 Units**

**Prerequisite(s):** HORT 219 F  
36 hours lecture and 54 hours lab per term. This course covers the use of LandCADD computer aided drafting and design program in the creation of 2-D and 3-D landscape and irrigation designs. It also includes the use of customized plant and irrigation symbols, intelligent drawing blocks, cross-referenced drawings and paper space/model space. Detail drawings, complex irrigation and grading plans will be developed for actual site situations. Presentation 2-dimensional and 3-dimensional rendered drawings and animated walk-throughs are developed using advanced tools in LandCADD. Pass/No Pass or Letter Grade option. (Degree Credit)

## Humanities (HUM)

**HUM N01 F Supervised Tutoring 0 Units**

NON CREDIT COURSE: This course provides individualized units of study based on individual student needs in writing, reading or mathematics skills.

**HUM 170 F Education: Tutoring Individual 2 Units**

36 hours lecture per term. This course provides preparation and training for successful tutoring in multiple subject areas. Instruction will focus on tutoring principles, specific tutoring techniques, study skills, communication skills, tutoring the ESL student, cultural differences, learning styles, and learning disabilities. Completion of 25 hours of field experience is required. This course is strongly recommended for both students who wish to tutor in the Fullerton College Tutoring Center and students interested in careers in education. (CSU) (Degree Credit)

**HUM 299 F Humanities Independent Study 1 Unit**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better  
54 hours independent study per term. This course will provide advanced students the opportunity for independent study that will enrich their academic experience in the humanities. Students may choose to expand and deepen their knowledge in areas of language, literature, writing, communication, or special topics not covered in existing courses offered in the Humanities Division. Students will attend weekly arranged individual conferences or group meetings. (CSU) (Degree Credit)

## Interdisciplinary Studies (INDS)

**INDS 298AF Interdisciplinary Studies Seminar for Study Abroad 1 Unit**

18 hours lecture per term. This course will develop critical thinking, research, writing and presentation skills as they apply to issues such as trip planning, managing money, safety, coping with stressful situations, and adapting to new cultures as part of a Study Abroad Program. Pass/No Pass only. (Degree Credit) (CSU)

# Interior Design (IDES)

## IDES 085 F Kitchen and Bath Design

2 Units

**Prerequisite(s):** IDES 110 Beginning Drafting for Interior Design.

18 hours lecture and 54 hours lab per term. This course covers functional planning for the kitchen and bath. The emphasis is on layout, materials, appliances and fixtures, lighting and electrical planning, design character, construction and plumbing. This course also covers trends and career options. (Degree Credit)

## IDES 100 F Fundamentals of Interior Design

3 Units

54 hours lecture per term. This course covers the application of design principles and elements in planning complete interior environments that meet individual, functional, legal and environmental needs. The design process will be emphasized including user requirements, design concept, basic space planning, furniture arrangement, color theory, and coordination of fabrics and surfaces. (CSU) (Degree Credit)

## IDES 105 F Interior Design Studio I

2 Units

**Advisory:** IDES 100 F.

18 hours lecture and 54 hours lab per term. This course is designed to apply concepts and theories presented in the lecture course, Fundamentals of Interior Design IDES 100 F. Emphasis is placed on the design process in developing solutions for interior design projects. Special attention is given to Design Principles and Elements; the application of color; coordination of furniture; and the selection of materials and finishes. There is individualized feedback during studio project work. Students participate in class presentations. (CSU) (Degree Credit)

## IDES 110 F Drafting for Interior Design (formerly Drafting - Interior Design)

3 Units

36 hours lecture and 54 hours lab per term. This course covers the development of drafting techniques and graphic skills for application in architectural drawings including floor plans, lighting and electrical plans, elevations, section drawings, and orthographic projection. Basic construction principles and terminology will be covered. (CSU) (Degree Credit)

## IDES 130 F Applied Color and Design Theory

4 Units

54 hours lecture and 54 hours lab per term. This course examines color and design theory and its application in developing solutions to interior design projects. The effects of cultural influences, physiology and psychology will be explored. (CSU) (Degree Credit)

## IDES 147 F Office Planning

3 Units

**Prerequisite(s):** IDES 110 F or ARCH 100 F with a grade of C or better.

36 hours lecture, 54 hours lab per term. This course will cover large and small office planning including client improvement practices and the use of modular systems. Also covered are code requirements and the use of electrical, plumbing and mechanical systems. (CSU) (Degree Credit)

## IDES 150 F Interior Materials and Products

4 Units

72 hours lecture per term. This course explores selection criteria, application and evaluation of products and materials used in commercial and residential interior design. Included are textiles, furnishings, finishes, sustainability standards and the LEED system. Field trips to manufacturers and vendors are an integral part of this course. (CSU) (Degree Credit)

## IDES 170 F Space Planning I

3 Units

**Prerequisite(s):** ARCH 124 F or IDES 110 F, with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course covers the design process for residential space planning, including remodeling, kitchen and bath design, furniture plan, materials and products selection, universal design, lighting and electrical plan, plumbing considerations and building code requirements.. (CSU) (Degree Credit)

## IDES 175 F Space Planning II

3 Units

**Prerequisite(s):** ARCH 124 F or IDES 110 F, with a grade of C or better

**Advisory:** IDES 170 F.

36 hours lecture and 54 hours lab per term. This course will cover the design process for designing a commercial interior including office systems, tenant improvement practices, the implementation of mechanical systems, building code requirements, lighting considerations, and universal design. (CSU) (Degree Credit)

## IDES 180 F History of Architecture and Furnishings I (formerly History of Architecture I)

3 Units

54 hours lecture per term. This course covers the historical relationship between the decorative arts, period furniture and interior architecture in this overview of design heritage from antiquity through the 19th century in France. Emphasis is placed on style development as it relates to social, economic and political influences. (CSU) (Degree Credit)

## IDES 190 F History of Architecture and Furnishings II (formerly History of Interior Architecture II)

3 Units

**Advisory:** IDES 180 F.

54 hours lecture per term. This course provides an overview of the historical relationship between architecture, period furniture and the decorative arts. It begins with 16th century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to social, economic, and political forces. (CSU) (Degree Credit)

## IDES 200 F Interior Illustration I

2 Units

**Advisory:** IDES 100 F and IDES 130 F

This course covers the application of the methods, techniques and tools used for illustrating interior spaces and furnishings. Included are one-point and two-point perspective rendering. (CSU) (Degree Credit)

## IDES 210 F Fundamentals of Lighting

3 Units

54 hours lecture per term. This course covers the fundamentals of lighting, design, theory and application including the history and vocabulary of lighting; how light affects color and vision; lighting techniques for interior designers; code requirements, and energy efficient lighting practices. (Degree Credit) (CSU)

## IDES 215 F Interior Design Studio II

2 Units

**Prerequisite(s):** IDES 100 F and IDES 105 F, with a grade of C or better

**Advisory:** IDES 110 F, IDES 130 F, IDES 170 F and IDES 200 F.

18 hours lecture and 54 hours lab per term. This course allows the student to pursue individual interior design projects with supervision and the use of the Interior Design lab resources. Universal Design, Green Design, space planning, interior components, lighting systems, architectural elements and specification writing will be integrated into research projects emphasizing a problem-solving approach. (CSU) (Degree Credit)

## IDES 220 F Interior Design Building Codes

3 Units

**Advisory:** IDES 100 F

54 hours lecture per term. This course explores California building codes, regulations, standards and specifications concerning life-safety issues, Title 24, universal design and Green requirements relative to residential and commercial interior design. Special attention is given to construction type, occupancy, exit path of travel, safety, testing and compliance for interior materials and products. (CSU) (Degree Credit)

## IDES 225 F Interior Illustration II

2 Units

**Advisory:** IDES 200 F

18 hours lecture and 54 hours lab per term. This course expands on the techniques learned in IDES 200 F for rendering interior spaces and furnishings by incorporating a variety of computer-aided design programs in creating 3D drawings. (CSU) (Degree Credit)

**IDES 230 F Business and Professional Practice** 3 Units  
54 hours lecture per term. This course covers the business and professional management of an interior design practice including legal requirements, project management and business practices. (CSU) (Degree Credit)

**IDES 240 F Interior Design Internship** 2-4 Units  
18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course allows students to earn credit through supervised employment in an interior design establishment. This course meets weekly with the instructor. This course should be taken when students are nearing completion of the Interior Design certificate or degree. (CSU) (Degree Credit)

**IDES 248AF Restaurant and Hotel Design** 2 Units  
**Prerequisite(s):** with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course covers the principles of space planning applied to the unique problems of the hospitality industry including design, systems and specifications. (CSU) (Degree Credit)

**IDES 249BF Study of International Architecture and Design** 2 Units  
36 hours lecture per term. This course includes pre-trip lectures and guided trips during travel tour. The course content will vary according to area studied, but will include emphasis of architecture and interior design of specific European countries or areas on the American continent. (CSU) (Degree Credit)

**IDES 249CF Study of International Architecture and Design** 3 Units  
54 hours lecture per term. This course includes pre-trip lectures and guided trips during travel tour. The course content will vary according to area studied, but will include emphasis on architecture and interior design of specific European countries or areas on the American continent. (CSU) (Degree Credit)

**IDES 260 F Interior Illustration III** 2 Units  
**Advisory:** IDES 200 F.  
18 hours lecture and 54 hours lab per term. In this course, the student refines the skills learned in IDES 225 F, for communicating design concepts in 3D. Techniques in rapid visualization are explored and combined with digital rendering for enhancement of portfolio presentations. (CSU) (Degree Credit)

**IDES 265 F Interior Design Studio III** 2 Units  
**Prerequisite(s):** IDES 170 F and IDES 215 F, with a grade of C or better.  
**Advisory:** IDES 130 F, IDES 150 F, IDES 190 F, IDES 200 F and IDES 210 F.  
18 hours lecture and 54 hours lab per term. This course explores design solutions for total interior space planning of commercial environments. This is achieved through programming, development of working drawings, codes application, lighting and electrical analysis, and the research of materials, fixtures, furniture, and equipment. (CSU) (Degree Credit)

**IDES 275 F Interior Design Studio IV** 2 Units  
**Prerequisite(s):** IDES 265 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course focuses on the application of the interior design process for complete custom residential spaces. A comprehensive design approach will be utilized that includes programming, lighting and electrical plans, selection of surfaces, materials, fixtures, furnishings, equipment, and custom cabinetry. (CSU) (Degree Credit)

## Italian (ITAL)

**ITAL 101 F Elementary Italian I** 5 Units  
90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Italy. This course is conducted primarily in Italian and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE

**ITAL 102 F Elementary Italian II** 5 Units  
**Prerequisite(s):** ITAL 101 F with a grade of C or better or one year of high school Italian with a grade of C or better  
90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Italy. This course is conducted primarily in Italian and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ITAL 203 F Intermediate Italian III** 4 Units  
**Prerequisite(s):** ITAL 102 F with a grade of C or better or Pass or two years of high school Italian with a grade of C or better  
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing Italian based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ITAL 204 F Intermediate Italian IV** 4 Units  
**Prerequisite(s):** ITAL 203 F with a grade of C or better or Pass or three years of high school Italian with a grade of C or better  
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Italian based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Italian culture by introducing literary readings. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Japanese (JAPN)

**JAPN 101 F Elementary Japanese I** 5 Units  
90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Japanese-speaking countries. This course is conducted primarily in Japanese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**JAPN 102 F Elementary Japanese II** 5 Units  
**Prerequisite(s):** JAPN 101 F with a grade of C or better or Pass or one year of high school Japanese with a grade of C or better.  
90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Japanese-speaking countries. This course is conducted primarily in Japanese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**JAPN 203 F Intermediate Japanese III 4 Units**

**Prerequisite(s):** JAPN 102 F with a grade of C or better or Pass or two years of high school Japanese with a grade of C or better  
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking, writing Japanese based on culture and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**JAPN 204 F Intermediate Japanese IV 4 Units**

**Prerequisite(s):** JAPN 203 F with a grade of C or better or Pass or three years of high school Japanese with a grade of C or better  
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Japanese based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Japanese culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**Faculty**

Noriko Oppenheim

**Journalism (JOUR)****JOUR 101 F Reporting and Writing 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better  
54 hours lecture per term. This course provides an introduction to the skills and practices of news reporting as applied to the various types of media outlets. Focus is placed on various story types - news, feature, editorial, online, column sports, and press release. (CSU) (UC) (Degree Credit) AA GE (C-ID: JOUR 110)

**JOUR 102 F Advanced Reporting and Writing 3 Units**

**Prerequisite(s):** JOUR 101 F with a grade of C or better  
54 hours lecture per term. This course covers the study and practice of advanced reporting and newsgathering techniques are the main focus stressing interviewing and research skills, investigative, special assignment and online reporting. (Degree Credit) (CSU) (C-ID: JOUR 210)

**JOUR 108 F Feature Writing 3 Units**

**Prerequisite(s):** ENGL 060 F or ENGL 099 F, with a grade of Pass or ESL 186 F or ESL 190 F with a grade of C or Pass, or recommended score on the English placement test.  
54 hours lecture per term. This course covers the principles of feature writing for magazines, newspapers, and other print and online media. The instruction stresses the process of organizing the writing of non-fiction articles from idea to finished product. Students will receive instruction on techniques of query writing, developing and writing a publishable feature article. Copyright and libel laws will be included; both professional and peer evaluations will be utilized. (CSU) (Degree Credit)

**JOUR 110 F Mass Media Survey 3 Units**

54 hours lecture per term. This course provides an introduction to the mass communications media and a critical consideration of their roles in our society. Mass media under consideration in this course will include: books, newspapers, magazines, movies, radio, television, film and the Internet. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: JOUR 100)

**JOUR 110HF Honors Mass Media Survey 3 Units**

54 hours lecture per term. This Honors-enhanced course provides an introduction to the mass media and a critical consideration of their roles in our society enhanced for Honors students designed to develop critical thinking, and writing strategies, including research and documentation skills necessary for academic success. The areas examined include books, newspapers, magazines, movies, radio, television, film and the Internet. This course will be conducted as a seminar and it will require a significant independent research project that uses correct documentation skills. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: JOUR 100)

**JOUR 132 F Introduction to Magazine Production 3 Units**

54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for the online publication - fctorch.net. (Degree Credit) (CSU) (C-ID: JOUR 130)

**JOUR 133 F Beginning Magazine Production 3 Units**

**Prerequisite(s):** JOUR 132 F with a grade of C or better  
54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Greater emphasis is placed on writing longer, in-depth magazine articles, editing techniques, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for the online publication. (Degree Credit) (CSU) (C-ID: JOUR 131)

**JOUR 134 F Intermediate Magazine Production 3 Units**

**Prerequisite(s):** JOUR 133 F with a grade of C or better  
54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine and online publications is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs, multimedia storytelling and packaging all elements together. (CSU) (Degree Credit)

**JOUR 135 F Advanced Magazine Production 3 Units**

**Prerequisite(s):** JOUR 134 F with a grade of C or better  
54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for online publication. (CSU) (Degree Credit)

**JOUR 140 F Public Relations and Publicity 3 Units**

54 hours lecture per term. In this course, students will study and practice the techniques and responsibilities of corporate, agency, and non-profit public relations with special attention to publicity writing and public relations campaign development (CSU) (C-ID: JOUR 150)

**JOUR 150 F Social Media Communications 3 Units**

54 hours lecture and 18 hours lab per term. This course focuses on the use of social media in journalism and public relations. Students will analyze the impact of social media; learn how to read statistics about social media usage; and create professional or academic social media accounts, using posts to cultivate an expertise in a subject matter of interest. (CSU) (Degree Credit)

**JOUR 196 F Specialized Reporting (formerly Communications Seminar)** **3 Units**

54 hours lecture per term. This course is designed to expose students to specialized reporting skills in the field of journalism. This course offers the student opportunity for specialized training in greater depth than can be offered in a general course. Topics will vary from semester to semester depending on new developments in industry, and need for specialized training. See class schedule for current seminar offerings. Students may enroll in up to a maximum of four semesters. (CSU) (Degree Credit)

**JOUR 199 F Journalism Independent Study** **1-3 Units**

**Prerequisite(s):** JOUR 101 F with a grade of C or better  
54-162 hours independent study per term. This course is designed for advanced students who wish to increase their knowledge of journalism and public relations through individual study. Independent laboratory research problems with staff supervision may be approved. Project with written report or outside reading with written report is required. (CSU) (UC Credit Limitation depending upon course content; UC review required) (Degree Credit)

**JOUR 210 F Multimedia Reporting** **3 Units**

54 hours lecture and 18 hours lab per term. This course focuses on media article writing and digital storytelling. Students will develop multimedia news reporting and writing techniques with an emphasis on the Web. Students research, write, and edit articles as they practice the skills of gathering information from a variety of sources. Students synthesize, edit and prepare stories for dissemination online. Students will learn the basics of visual journalism storytelling, including basic elements of shooting video, recording audio, editing video and audio, and creating news websites. A culminating project will demonstrate knowledge of reporting and writing for print and broadcast on the web. (Degree Credit) (CSU) (C-ID: JOUR 120)

**JOUR 215 F UAV and Drone Reporting** **3 Units**

**Advisory:** : JOUR 101 F.  
36 hours lecture and 54 hours lab per term. This course is designed to give students the ability to learn about UAVs (drones) and how to use them in reporting. Special emphasis is placed on equipment selection, aerial photography and video storytelling, editing and safety and ethical considerations. (CSU) (Degree Credit)

**JOUR 219 F Photojournalism** **3 Units**

36 hours lecture and 54 hours lab per term. This course covers the basics of digital photography for publication both print and online such as news, advertising, feature, sports, lifestyle, photo essay, and documentary applications. Students will work with the student publications on campus. (Degree Credit) (CSU) (C-ID: JOUR 160)

**JOUR 220 F Introduction to Investigative Reporting** **3 Units**

**Prerequisite(s):** JOUR 101 F with a grade of C or better.  
54 hours lecture and 18 hours lab per term. This course is an introduction to watchdog reporting in local communities. Students will learn skills and techniques in investigative journalism, research methods and computer-assisted reporting, including data analysis. Students will participate in the production of college and community news websites. (CSU) (Degree Credit)

**JOUR 221 F Introduction to Visualizing Data** **3 Units**

54 hours lecture and 18 hours lab per term. This course focuses on finding and telling visual stories from large quantities of data. Students will find, obtain and analyze data. They will create accurate, telling visualizations - such as maps, charts, diagrams and graphs - to show statistical information; critically evaluate visual communication for accuracy, thoroughness and effectiveness; and study and practice techniques through the production of graphics for college and community publications. (CSU) (Degree Credit)

**JOUR 222 F Introduction to News Media Production** **3 Units**

36 hours lecture and 54 hours lab per term. This course is an introduction to news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (Degree Credit) (CSU) (C-ID: JOUR 130)

**JOUR 223 F Beginning News Media Production** **3 Units**

**Prerequisite(s):** JOUR 222 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course expands news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (CSU) (C-ID: JOUR 131)

**JOUR 224 F Intermediate News Media Production** **3 Units**

**Prerequisite(s):** JOUR 223 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course is expanded training in news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit).

**JOUR 225 F Advanced News Media Production** **3 Units**

**Prerequisite(s):** : JOUR 224 F with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course includes the following areas of study: reporting, editing, design, photojournalism, multimedia reporting and publishing techniques are also studied and practiced in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit).

**JOUR 230 F Virtual Reality Storytelling (formerly Virtual Reality/360 Storytelling)** **3 Units**

54 hours lecture per term. In this course, students will learn how to shoot and edit 360-degree video as they create non-fiction immersive content. The understanding of the VR mix, ranging from content creation to content consumption will be addressed. (Degree Credit) (CSU)

**JOUR 271 F Introduction to Spanish-Language Reporting** **3 Units**

**Advisory:** Understanding of conversational Spanish.  
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (C-ID: JOUR 130)

**JOUR 272 F Beginning Spanish-Language Reporting** **3 Units**

**Prerequisite(s):** JOUR 271 F with a grade of C or better  
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. (Degree Credit) (CSU) (C-ID: JOUR 131)

**JOUR 273 F Intermediate Spanish-Language Reporting** **3 Units**

**Prerequisite(s):** JOUR 272 F with a grade of C or better  
54 hours lecture and 18 hours lab per term. This course will continue to allow students to develop the methods and styles of reporting and writing in Spanish in multimedia format. It will prepare students to edit and publish multiple stories and photos on the campus' Spanish-language publication. (CSU) (Degree Credit)



**JOUR 274 F Advanced Spanish-Language Reporting 3 Units****Prerequisite(s):** JOUR 273 F with a grade of C or better

54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. (CSU) (Degree Credit)

**JOUR 290 F Internship in Journalism and Public Relations 2-4 Units**

18 hours lecture and 90-270 hours lab per term. This course offers career development opportunities for students and industry professional who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through employment/internships at newspapers, magazines, public relations firms, companies requiring journalism and public relations experts, radio, television, and cable stations. (CSU) (Degree Credit)

**JOUR 291 F Internship in Journalism and Public Relations II 2-4 Units****Prerequisite(s):** JOUR 290 F with a grade of C or better

18 hours lecture and 90-270 hours lab per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

**JOUR 292 F Internship in Journalism and Public Relations III 2-4 Units****Prerequisite(s):** JOUR 291 F with a grade of C or better

18 hours lecture and 90-270 hours of employment or unpaid internship per term. This course is designed to give the student the skills needed to market themselves as professionals in the entertainment and communication industries. (CSU) (Degree Credit).

**JOUR 293 F Internship in Journalism and Public Relations IV 2-4 Units****Prerequisite(s):** JOUR 292 F with a grade of C or better

18 hours lecture and 90-270 hours of employment or unpaid internships per term. This course is designed to help the students who are interning to transition into working as independent contractors in the communication and entertainment related industries. (CSU) (Degree Credit)

## Library Technology (LIB)

**LIB 100 F Introduction to Research 1 Unit****Advisory:** Basic computer literacy and ENGL 060 F or ENGL 099 F or ESL 186 F or eligibility for ENGL 100 F.

18 hours lecture per term. This course is designed to introduce students to research methods using print library materials, online information databases and the Web. Students will develop critical thinking skills to identify research needs and locate, retrieve, analyze, evaluate and cite appropriate resources on topics. This course is of special value to those students intending to transfer to a four-year institution. (CSU) (UC) (Degree Credit)

**LIB 100HF Honors Introduction to Research 1 Unit****Advisory:** Basic computer literacy and ENGL 060 F or ENGL 099 F or ESL 186 F or eligibility for ENGL 100 F.

18 hours lecture per term. This is an enhanced course designed to introduce honors students to using print library materials, online information databases, and the Web. Students will develop critical thinking skills to identify research needs and locate, retrieve, analyze, evaluate, and cite appropriate resources on topics. The course is of special value to those students intending to transfer to a four-year institution. (CSU) (UC) (Degree Credit)

## Machine Technology (MACH)

**MACH 101 F Introduction to Machine Tools (formerly MACH 091 F) 5 Units**

54 hours lecture and 108 hours lab per term. This is an introductory course designed to teach the fundamental skills used in the set up and operation of the engine lathes, milling machines, and surface grinders. Safety, shop mathematics, basic blueprint reading, cutting tool use and theory, selection of cutting speeds and feeds, and measurement techniques will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 102 F Intermediate Machine Tools (formerly MACH 092 F) 5 Units****Prerequisite(s):** MACH 101 F with a grade of C or better.

54 hours lecture and 108 hours lab per term. This intermediate level course is designed to advance the basic set up and operational skills developed in an introductory level machine tools course. Work will be performed on engine lathe, vertical milling machines, surface grinder, and sawing equipment. Students will also advance their skills in the use of various measuring tools, blueprint reading, shop mathematics and general machining techniques. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 103 F Advanced Machine Tools (formerly MACH 093 F) 5 Units****Prerequisite(s):** MACH 102 F with a grade of C or better.

54 hours lecture and 108 hours lab per term. This advanced level course is designed to further the set up and operational skills developed in an intermediate level machine tools course. Work will be performed on engine lathes, vertical milling machines, surface grinders, and sawing equipment. Students will also advance their skills in the use of various measuring tools, blueprint reading, shop mathematics, and general machining techniques. Computer numerical control (CNC) machines will also be utilized to complete laboratory assignments. Student entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 104 F Advanced Topics in Machine Technology 5 Units****Prerequisite(s):** MACH 103 F with a grade of C or better.

54 hours lecture and 108 hours lab per term. This advanced level course is designed to further the skills developed in the advanced level machine tools course. Work will be performed on engine lathes, vertical milling machines, surface grinders, and sawing equipment. Students will also advance their skills in the maintenance and repair of equipment used in machine and manufacturing facilities. Various machine and hand tools will also be utilized to complete laboratory assignments. CNC machines will also be utilized to complete laboratory assignments. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 105 F Conversational Programming I****3 Units****Prerequisite(s):** MACH 101 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This is an introductory course designed to teach the fundamental skills related to the setup and operation of conversational program-equipped computer numerically-controlled machine tools. Safety, tool selection, machine and controller functions, calculation and input of offsets, are also included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (Degree Credit) (CSU)

**MACH 106 F Conversational Programming II****3 Units****Prerequisite(s):** MACH 105 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This course is designed to teach the advanced setup and operation of conversational program-equipped computer numerically-controlled machine tools. Safety, tool selection, machine and controller functions, calculation and input of offsets, are also included. Students entering this program may enter a variety of manufacturing related fields such as machining; quality control; engineering; fabrication; and production management. (Degree Credit) (CSU)

**MACH 110 F CNC Machine Set-Up and Operation (formerly MACH 086 F)****3 Units****Advisory:** MACH 101 F.

45 hours lecture and 27 hours lab per term. This is an introductory course designed to teach the fundamental skills related to the setup and operation of computer numerically-controlled machine tools. Safety, tool selection, machine and controller functions, calculation and input of offsets are also included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 115 F CNC Parts Programming (formerly MACH 087 F)****3 Units****Advisory:** MACH 110 F.

45 hours lecture and 27 hours lab per term. This course covers manual programming techniques, calculations, and program development for CNC mills, machining centers and lathes. Three axis controllers will be discussed. Students will test part programs on CNC machines during lab hours. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 116 F Machine Tools****2 Units**

18 hours lecture and 54 hours lab per term. This course is for students majoring in mechanical drawing, industrial arts, engineering, and for students who wish to familiarize themselves with the machine tools of industry. Fundamentals of the machinist trade are taught. Students are taught the use of lathes, grinders, milling machines and measuring instruments. Methods planning for efficient machining is emphasized. (CSU) (Degree Credit)

**MACH 120 F Advanced CNC Machining (formerly MACH 088 F)****3 Units****Prerequisite(s):** MACH 115 F with a grade of C or better

45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction and practice in the concepts and practices associated with the successful programming and set up of CNC mills and lathes. Students will build upon prior experience with CNC machines to complete finished parts on CNC mills and lathes having various control types. Students will run programs and practice set-up processes during lab time. Student entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 130 F Multiple Axis CNC Set and Operation (formerly MACH 090 F)****3 Units****Prerequisite(s):** MACH 120 F with a grade of C or better

45 hours lecture and 27 hours lab per term. This course provides the student with instruction associated with the successful programming and set up of CNC mills with four and five axis of control. Students will build upon prior experience with CNC machines to complete finished parts on CNC mills with four and five axis of control. Students will run programs and practice set-up processes during laboratory time. Students will test part programs on CNC machines during laboratory hours. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 140 F Basic CNC Swiss Style Lathe Set-Up and Operation****3 Units****Advisory:** MACH 110 F.

45 hours lecture and 27 hours lab per term. This introductory course is designed to teach the fundamental skills used in the set up and operation of a basic CNC Swiss Style Lathe (screw machine). Safety, cutting tool use and theory, selection of cutting speeds/feeds will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 142 F Advanced CNC Swiss Style Lathe Set-Up and Operation****3 Units****Prerequisite(s):** MACH 140 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This is an advanced course designed to teach the skills used in the set up and operation of the CNC Swiss Style Lathe (screw machine). Safety, cutting tool use and theory, selection of cutting speeds/feeds will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 145 F Basic CNC Swiss Style Lathe Programming and Applications****3 Units****Prerequisite(s):** MACH 142 F with a grade of C or better

45 hours lecture and 27 hours lab per term. This is a programming and applications course designed to teach the fundamentals used to program a basic CNC Swiss Style Lathe (screw machine). Safety, cutting tool use and theory, selection of cutting speeds/feeds will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 150 F CNC Programming Using Mastercam (formerly MACH 050 F)** **3 Units**  
45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using Mastercam software to prepare CNC machine programs for both mills and lathes. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 152 F Advanced CNC Programming Using Mastercam (formerly MACH 052 F)** **3 Units**  
*Prerequisite(s):* MACH 150 F with a grade of C or better  
45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction in the concepts and practices associated with using Mastercam software to prepare CNC machine programs for both mills and lathes. Students will build upon prior experience with Mastercam to develop 3D wireframe models, surface models, derived models, and composite surface models. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 154 F CNC Programming Using Surfcam (formerly MACH 060 F)** **3 Units**  
45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using SURFCAM software to prepare CNC machine programs for both mills and lathes. Students will process programs that demonstrate the features and functions of the software. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 156 F Advanced CNC Programming Using Surfcam (formerly MACH 062 F)** **3 Units**  
*Prerequisite(s):* MACH 154 F with a grade of C or better or industry experience using Surfcam in a 2D environment.  
45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction in the concepts and practices associated with using Surfcam software to prepare CNC machine programs for both mills and lathes. Students will build upon prior experience using Surfcam to develop 3D wireframe models, surface models, derived models and composite surface models. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. Computer lab fee required. (CSU) (Degree Credit)

**MACH 157 F Computer-Aided Manufacturing** **3 Units**  
*Advisory:* MACH 115 F or MACH 150 F or MACH 154 F or industry experience with 2-3 axis CAM systems and CNC machine setup.  
45 hours lecture and 27 hours lab per term. This course explores new and advanced CAM programs. Students will program CNC machines with 4-5 axis capabilities. Students will develop programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and product management. (CSU) (Degree Credit)

**MACH 180 F Introduction to Metrology** **3 Units**  
45 hours lecture and 27 hours lab per term. This course is an introduction to metrology and measurement as it applies to the technical trades of machining, welding, fabrication, construction and drafting. This course covers the origins of measurements and standards that are commonly in use throughout industry. This course also covers applications and uses of several types of measurement systems from traditional tools still commonly used in advanced computer-driven inspection devices. (CSU) (Degree Credit)

**MACH 182 F Introduction to CMM Inspection and Romer Arms** **3 Units**  
*Advisory:* Ability to read and write in English.  
*Corequisite:* MACH 180 F with a grade of C or better. 45 hours lecture and 27 hours lab per term. This course will introduce the student to Coordinate Measuring Machines and Romer Arm fundamentals which utilize inspection software such as PC-DMIS or equivalent. This course covers the basics of set-up and operation of CMM machines including alignments, geometric feature definitions and calibrations. (CSU) (Degree Credit)

**MACH 184 F Advanced CMM and Romer Arm Inspection** **3 Units**  
*Prerequisite(s):* MACH 182 F with a grade of C or better.  
*Advisory:* Ability to read and write in English.  
45 hours lecture and 27 hours lab per term. This course is an advanced course using CMMs and Romer Arms which utilize PC-DMIS inspection software or equivalent. This course covers model-based definition inspection, advanced alignment, auto features, advanced dimensioning, fixturing/workholding for CMMs and CMM programming. (CSU) (Degree Credit)

**MACH 185 F CMM and Romer Arm Applications** **2 Units**  
*Advisory:* Ability to read and write in English.  
*Corequisite:* MACH 184 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course will cover common applications that are utilized with Coordinate Measuring Machines (CMM) and Romer Arms Fixturing and advanced methods of inspection will be reviewed. (CSU) (Degree Credit)

## Marketing (MKT)

**MKT 100 F Introduction to Marketing** **3 Units**  
54 hours lecture per term. This course is an introduction to marketing as an exchange involving all members of society. Focus will be on the evolution of the marketing system and the research of the demographic and behavioral dimensions of markets. Topics include market analysis, marketing planning and implementation, consumer behavior, marketing research, marketing mix strategies and internet marketing. The course incorporates current developments in marketing to acquaint students with the present-day challenges of marketing activities, including the social, cultural, economic, competitive, legal, ethical, and technological environments of marketing. This course lays the foundation for more advanced marketing courses and related subject areas. (CSU) (Degree Credit) AA GE

**MKT 103 F Principles of Advertising** **3 Units**  
54 hours lecture per term. This course covers the role of historical, economic and social aspects of advertising. The development of creative advertising copy, advertising budgets, analysis of successful advertising campaigns and the creation of advertisements for the three broad categories of media (broadcast, print and digital) are discussed. (CSU) (Degree Credit)

**MKT 151 F Digital Marketing (formerly New Media) 3 Units**

54 hours lecture per term. This course will provide a broad overview of digital marketing tools. Course topics include website design and evaluation, SEO, internet advertising, content management, social media, email marketing, mobile marketing and analytics tools. (Degree Credit) (CSU)

**MKT 152 F Internet Advertising 2 Units**

36 hours lecture per term. This course will introduce students to advertising and promotional strategies using the Internet. Topics to be covered include new technologies in online advertising, buying and selling ads, direct marketing and sales promotion on the Internet, targeting and Web measurement techniques, and important legal issues. Students will develop an Internet promotional plan portfolio. (CSU) (Degree Credit)

**MKT 153 F Customer Service on the Internet 2 Units**

27 hours lecture and 27 hours lab per term. This course introduces the principles of relationship marketing and serving customers on the Internet. Topics include determining customer expectations, measuring success, using the website, e-mail, and extranets to increase customer satisfaction, and creating a relationship-based website. Students will develop an internet customer service plan. (CSU) (Degree Credit)

**MKT 160 F Introduction to Digital Marketing 1 Unit**

18 hours lecture per term. This course provides an introduction to digital marketing. Topics to be discussed include the marketing mix, when to use digital marketing, a broad overview of the tools used by marketers, trends in digital marketing and budget considerations. (CSU) (Degree Credit)

**MKT 161 F Web Design for Digital Marketing 1 Unit**

18 hours lecture per term. This course provides an overview of the principles of web design and will cover items including page elements and landing pages. (CSU) (Degree Credit)

**MKT 162 F Search Engine Optimization 1 Unit**

18 hours lecture per term. This course provides an introduction to the key tools used for SEO (search engine optimization). Keyword selection, links and popularity metrics will be reviewed. (CSU) (Degree Credit)

**MKT 163 F Search Engine Marketing 1 Unit**

18 hours lecture per term. This course provides an introduction to the key tools used for search engine marketing. Understanding the digital marketing space, including paid search marketing, choosing target markets, writing ad copy, buying advertising space, and Google AdWords will be covered. (CSU) (Degree Credit)

**MKT 164 F Online Advertising 1 Unit**

18 hours lecture per term. This course provides an introduction to the key tools used for online advertising. Students will understand display network, ad targeting, banner ad design, and remarketing. (CSU) (Degree Credit)

**MKT 165 F Content Considerations for Digital Marketing 1 Unit**

18 hours lecture per term. This course provides an overview of creating and finding effective content for a digital presence. The concepts of personas and content remarketing will be covered. (CSU) (Degree Credit)

**MKT 166 F Social Media Marketing 1 Unit**

18 hours lecture per term. This course will overview the key social media platforms, discuss pros/cons of each, explain how to create a social media plan and measure the success of an implementation. (CSU) (Degree Credit)

**MKT 167 F Email Marketing 1 Unit**

18 hours lecture per term. This course will overview using email to complement a digital marketing strategy. Where to find email lists, appropriate content, measuring email success and customer relationship management (CRM) will all be discussed. (CSU) (Degree Credit)

**MKT 168 F Digital Analytic Tools 1 Unit**

18 hours lecture per term. This course will describe the key analytic tools used by digital marketers, with a focus on metrics and key performance indicators. Google Analytics will be overviewed and students will receive hands-on experience reading Google Analytic reports. (CSU) (Degree Credit)

**MKT 169 F Digital Marketing Capstone - Strategy and Execution 1 Unit**

18 hours lecture per term. This capstone course provides students with the preparation for and the opportunity to complete a capstone project related to digital marketing. Topics may include an explanation of the strategy and digital planning process, the creation of a digital media calendar and preparation of digital media elements. (Degree Credit) (CSU)

**MKT 201 F Small Business Promotions 3 Units**

54 hours lecture per term. This course focuses on the techniques used to promote a small business and develop effective marketing communication strategies. Emphasis is on creating an effective promotional plan and devising affordable ways to communicate with customers through local media, sales promotion, the internet, publicity, brochures, direct mail and other methods. (CSU) (Degree Credit)

**MKT 203 F Principles of Retail Management 3 Units**

54 hours lecture per term. This course examines the principles and practices used in the management of successful retail stores. Topics include site selection, layout, organization, merchandising, staffing, positioning, customer service, promotional techniques, and all aspects of the critical buying function. (CSU) (Degree Credit)

**MKT 205 F Understanding Multicultural Markets in U.S. 3 Units**

54 hours lecture per term. This course provides comprehensive coverage of the multicultural marketing environment in the U.S., taking into consideration the changing needs and growing influence of ethnic and racial groups. Exploring the differences and commonalities that exist among the groups, the course examines the roles of business and the U.S.' marketing system in providing goods and services to meet each group's needs. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit)

**MKT 208 F Principles of Selling 3 Units**

54 hours lecture per term. This course emphasizes the fundamentals of selling and the new practices needed to succeed in today's information economy. Topics include understanding buyer behavior, building trust, communication and negotiation skills, oral presentation skills and the strategic selling process. This course will also cover the impact of the World Wide Web, sales, strategies used to build global relationships, ethical and legal considerations in selling, and a survey of customer relationship management technology. (CSU) (Degree Credit)

## Mathematics (MATH)

**MATH N01 F Supervised Tutoring: Math 0 Units**

NON-CREDIT COURSE: This course provides individual tutoring based on each student's needs in mathematics and computer science. Students wishing to use the Math Lab must enroll in this course. (Non-Degree Credit)

**MATH 004 F Basic Mathematics I 2 Units**

36 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. Topics include arithmetic operations with whole numbers and fractions, rounding and estimation, and applied problems. Students are not permitted to use calculators. Pass/No Pass only. (Non-Degree Credit)

<p><b>MATH 006 F Basic Mathematics II</b> 2 Units  <i>Prerequisite(s)</i>: MATH 004 F with a grade of Pass.            36 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. Topics include arithmetic operations and applied problems with decimals, rounding, estimation, ratios, problem solving with proportions, percent and applications, the arithmetic of denominate numbers, introduction to the metric system, and measurement geometry. Calculators will be required for selected topics. Pass/No Pass only. (Non-Degree Credit)</p>	<p><b>MATH 030 F Plane Geometry</b> 4 Units  <i>Advisory</i>: MATH 020 F or any previous Algebra course.            72 hours lecture per term. This course is an introduction to Euclidean geometry and includes theorems and proofs, sets, congruent and similar polygons, circles, geometric constructions, areas, volumes, geometric loci, elementary logic and deductive reasoning. Calculators may be required for selected topics. (Degree Credit)</p>
<p><b>MATH 007 F Essentials of Basic Math</b> 3 Units            54 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. The course includes arithmetic operations with whole numbers, fractions, decimals, and percent, estimation, and solving applied problems. Pass/No Pass only. (Non-Degree Credit)</p>	<p><b>MATH 031 F Support for College Algebra</b> 2 Units  <i>Corequisite(s)</i>: MATH 141 F.            Concurrent 36 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in college algebra. Students must be concurrently enrolled in MATH 141 F. Topics include: a review of computational skills developed in intermediate algebra, factoring, operations on rational and radical expressions, absolute value equations and inequalities, exponential and logarithmic expressions and equations, conic sections, functions including domain and range, composition and inverses, and graphing. This course is appropriate for students who are confident in their beginning algebra skills. A graphing calculator is required. Pass/No Pass only. (Degree Credit)</p>
<p><b>MATH 010 F Basic Mathematics</b> 4 Units            72 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. The course includes: operations of arithmetic with whole numbers, fractions, decimals; percent; estimation; equations and applied problems; introduction to the metric system; and the arithmetic of denominate numbers. Calculators will be required for selected topics. (Non-Degree Credit)</p>	<p><b>MATH 032 F Support for Calculus for Business</b> 2 Units  <i>Corequisite(s)</i>: MATH 130 F.            Concurrent 36 hours lecture per term. This course covers the skills and concepts necessary for success in MATH 130 F is required. Topics include factoring polynomials, solving linear, quadratic, polynomial, and exponential equations, graphing lines and parabolas, laws of exponents and logarithms, functions, and solving systems of linear equations. Students must be concurrently enrolled in MATH 130 F. Pass/No Pass only. (Degree Credit)</p>
<p><b>MATH 015 F Pre-Algebra</b> 4 Units            72 hours lecture per term. This course includes operations on integers, fractions, mixed numbers and decimals, ratio, proportion and percentages, working with variable expressions, interpretation of statistical graphs, measurement and geometry, and an introduction to polynomials and graphing. Calculators will be required for selected topics. (Non-Degree Credit)</p>	<p><b>MATH 033 F Support for Liberal Arts Mathematics</b> 1 Unit  <i>Corequisite(s)</i>: MATH 100 F.            Concurrent 18 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in liberal arts mathematics. Topics include rounding, calculator usage, percentages, operations with fractions, using formulas and solving equations. Students must be concurrently enrolled in MATH 100 F. Pass/No Pass only. (Degree Credit)</p>
<p><b>MATH 020 F Elementary Algebra</b> 4 Units  <i>Advisory</i>: MATH 015 F or any previous algebra course.            72 hours lecture per term. This course includes the properties of real numbers, factoring, exponents and radicals, solving and graphing linear equations, polynomials and rational algebraic expressions, and linear systems of equations. Calculators will be required for selected topics. (Degree Credit)</p>	<p><b>MATH 034 F Support for Trigonometry</b> 2 Units  <i>Corequisite(s)</i>: MATH 142 F.            Concurrent 36 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in trigonometry. Students must be concurrently enrolled in MATH 142 F. Topics include: rational and radical expressions, laws of exponents, angles and triangles, graphing functions including transformations, calculator procedures, and geometry formulas. This course is appropriate for students who are confident in their beginning algebra skills. A graphing calculator is required. Pass/No Pass only. (Degree Credit)</p>
<p><b>MATH 024 F Pre-Statistics</b> 6 Units            108 hours lecture per term. This course is an accelerated pathway to prepare students for transfer-level statistics. It covers core concepts from elementary algebra, intermediate algebra, and descriptive statistics. Topics include ratios, rates and proportional reasoning; arithmetic reasoning using fractions, decimals and percents; evaluating expressions, solving equations, analyzing algebraic forms to understand statistical measures; use of linear, quadratic, absolute value, exponential, and logarithmic functions to model bivariate data; graphical and numerical descriptive statistics for quantitative and categorical data. (Degree Credit)</p>	<p><b>MATH 040 F Intermediate Algebra</b> 4 Units  <i>Prerequisite(s)</i>: MATH 020 F with a grade of C or better or by assessment through the college's multiple measures placement processes.            72 hours lecture per term. This intermediate algebra course is appropriate for students preparing to take MATH 129 F, MATH 141 F, MATH 141HF, or MATH 142 F. This course includes products and factoring, exponents and radicals, fractions, functions and graphs, linear and quadratic equations, linear inequalities, logarithms and related topics at an intermediate level. Calculators will be used for selected topics. This course also meets the prerequisite for MATH 100 F, MATH 120 F, MATH 120HF and SOSC 120 F. Students who receive credit for MATH 040 F may not receive credit for MATH 041 F. (Degree Credit) AA GE</p>
<p><b>MATH 026 F Support for Introductory Statistics</b> 2 Units  <i>Corequisite(s)</i>: MATH 120 F.            Concurrent 36 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in statistics. Students must be concurrently enrolled in MATH 120 F. Topics include concepts from pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand college-level statistics. Concepts are taught through the context of descriptive data analysis. Additional emphasis is placed on solving and graphing linear equations and modeling with linear functions. Pass/No Pass only. (Degree Credit)</p>	

**MATH 041 F Combined Elementary and Intermediate Algebra 6 Units**

108 hours lecture per term. This course is designed for students who would like to complete elementary and intermediate algebra in one semester. It covers factoring, exponents, linear, quadratic, rational, and absolute value equations and inequalities, radical equations, operations with polynomials, radical and rational expressions, systems of equations and inequalities, linear, quadratic, exponential and logarithmic functions and their graphs, complex numbers, and conic sections. Students who have completed MATH 020 F may take MATH 040 F, MATH 041 F or MATH 043 F. However, students who receive credit for MATH 041 F may not receive credit for MATH 040 F. (Degree Credit) AA GE

**MATH 043 F Intermediate Algebra for Statistics and Liberal Arts 4 Units**

**Prerequisite(s):** MATH 020 F with a grade of C or better or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This course emphasizes applications, mathematical modeling of data and interpretation of results. The course includes linear, quadratic, rational, exponential and logarithmic functions and their graphs, solving equations involving these functions, solving linear inequalities, and solving systems of linear equations at an intermediate level. Graphing calculators will be required for selected topics. (Degree Credit) AA GE

**MATH 100 F Liberal Arts Mathematics 3 Units**

**Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 033 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 033 F as a concurrent support course instead of taking a prerequisite course. 54 hours lecture per term. This course provides an introduction to a variety of mathematical topics including the mathematics of finance, set theory, probability, statistics, logic or geometry, and other selected topics. It is designed for students majoring in liberal arts, education or communication. Calculators or computers may be used for selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MATH 120 F Introductory Probability and Statistics 4 Units**

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F, with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course.

**Advisory:** READ 096 F or reading skills clearance

Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course. 72 hours lecture per term. This course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 120 F may not receive credit for SOSC 120 F. (Degree Credit) (CSU) (UC Credit Limitation: MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF and SOSC 120 F combined maximum credit, one course) AA GE, CSU GE, IGETC (C-ID: MATH 110)

**MATH 120HF Honors Introductory Probability and Statistics 4 Units**

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F with a grade of C or better or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 096 F or equivalent or by assessment through the college's multiple measures placement processes.

Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course. 72 hours lecture per term. This Honors-enhanced course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include: summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 120HF may not receive credit for SOSC 120 F. (Degree Credit) (CSU) (UC Credit Limitation: MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF and SOSC 120 F combined; maximum credit, one course) AA GE, CSU GE, IGETC (C-ID: MATH 110)

**MATH 121 F Enhanced Introductory Probability and Statistics 5 Units**

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F, with a grade of C or better or by assessment through the college's multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course.

**Advisory:** READ 096 F or reading skills clearance.

Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course. 90 hours lecture per term. This course contains the same content as MATH 120 F, but includes a fifth unit of instruction to help students who can benefit from additional support. This course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 121 F may not receive credit for MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF or SOSC 120 F. (Degree Credit) (CSU) AA GE, CSU GE, IGETC

**MATH 129 F College Algebra for Business Calculus 4 Units**

**Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better, or math skills clearance

72 hours lecture per term. This course includes a review of basic topics from intermediate algebra, equations and inequalities, functions and graphing including exponential and logarithmic functions, building mathematical models in business, finance and economics, systems of equations and inequalities, and an introduction to spreadsheets and/or graphing software. The course is designed for students planning to enroll in MATH 130 F. A scientific calculator will be required; a graphing calculator may be required. (This course does not meet requirements in the Business Division and will not substitute for BUS 151 F. See Business and Computer Information Systems Division for Business requirements.) (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE

**MATH 130 F Calculus for Business** 4 Units

**Prerequisite(s):** MATH 129 F with a grade of C or better or math skills clearance.

72 hours lecture per term. This course includes fundamentals of analytic geometry and calculus; differential calculus, integral calculus, and selected applications of calculus; functions and managerial planning and their use in economics and business. A scientific calculator will be required; a graphing calculator may be required. Computer applications may be included. (Degree Credit) (CSU) (UC Credit Limitation; MATH 130 F, MATH 151 F and MATH 151HF, combined maximum credit one course) AA GE, CSU GE, IGETC (C-ID: MATH 140)

**MATH 141 F College Algebra** 4 Units

**Prerequisite(s):** MATH 040 F or MATH 041 F, and MATH 030 F with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course. 63 hours lecture and 27 hours lab per term. This course is designed to prepare students for the study of calculus. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculators will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141HF and MATH 142 F are required for enrollment in MATH 151 F. (Degree Credit) (CSU) (UC Credit Limitation; MATH 141 F, MATH 141HF and MATH 129 F; combined maximum combined credit, 1 course) AA GE, CSU GE, IGETC

**MATH 141HF Honors College Algebra** 4 Units

**Prerequisite(s):** MATH 040 F or MATH 041 F, and MATH 030 F with a grade of C or better or by assessment through the college's multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course. 63 hours lecture and 27 hours lab per term. This Honors-enhanced course is designed to prepare students for the study of calculus. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculations will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141HF and MATH 142 F are required for enrollment in MATH 151 F. (Degree Credit) (CSU) (UC Credit Limitation; MATH 141 F, MATH 141HF and MATH 129 F combined; maximum credit, 1 course) AA GE, CSU GE, IGETC

**MATH 142 F Trigonometry** 4 Units

**Prerequisite(s):** MATH 040 F or MATH 041 F, and MATH 030 F, with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take a concurrent support course, MATH 034 F, instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take a concurrent support course, MATH 034 F, instead of taking a prerequisite course. 72 hours lecture per term. This is a one-semester course in trigonometry designed to prepare students for the study of calculus. The topics to be covered include the following: algebraic skills, measurements of angles, trigonometric functions and inverse trigonometric functions, trigonometric equations and identities, graphing of trigonometric functions, solutions of triangles, applications, complex numbers, polar coordinates and DeMoivre's theorem. Graphing calculators will be used for selected topics. Course may be taken concurrently with MATH 141 F or MATH 141HF. Both MATH 141 F or MATH 141HF, and MATH 142 F are required for enrollment in MATH 151 F. (Degree Credit) (CSU) AA GE, CSU GE

**MATH 143 F Enhanced College Algebra** 5 Units

**Prerequisite(s):** MATH 030 F and MATH 040 F or MATH 041 F, with a grade of C or better or equivalent or by assessment through the college's multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course. 81 hours lecture and 27 hours lab per term. This course is designed to prepare students for the study of calculus. This course contains the same content as MATH 141 F, but includes a fifth unit of instruction to help students who can benefit from additional support. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculators will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141HF or MATH 143 F, and MATH 142 F are required for enrollment in MATH 151 F. Students who receive credit for MATH 143 F may not receive credit for MATH 141 F or MATH 141HF. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MATH 151 F Calculus I (formerly MATH 150AF)** 4 Units

**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F and MATH 142 F, with a grade of C or better, or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This course covers limits and continuity, differentiation of algebraic, transcendental and inverse functions, applications of differentiation, antiderivatives and indefinite integrals, and the definite integral. Graphing calculators or related software will be used for selected topics. (Degree Credit) (CSU) (UC Credit Limitation: MATH 130 F, MATH 151 F and MATH 151HF combined; maximum credit, one course) AA GE, CSU GE, IGETC

**MATH 151HF Honors Calculus I (formerly MATH 150HF) 4 Units**

**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F and MATH 142 F, with a grade of C or better, or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This Honors-enhanced course covers limits and continuity, differentiation of algebraic, transcendental and inverse functions, applications of differentiation, anti-derivatives and indefinite integrals, and the definite integral. Graphing calculators will be used for selected topics. (Degree Credit) (CSU) (UC Credit Limitation: MATH 130 F, MATH 151 F and MATH 151HF, combined maximum credit one course) AA GE, CSU GE, IGETC (C-ID: MATH 210)

**MATH 152 F Calculus II (formerly MATH 150BF) 4 Units**

**Prerequisite(s):** MATH 151 F or MATH 151HF, with a grade of C or better

72 hours lecture per term. This is a second semester calculus course covering differential equations, applications of integration, integration techniques, improper integrals, sequences and series, conics, parametric equations, and polar coordinates. Graphing calculators will be used for selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 220)

**MATH 152HF Honors Calculus II 4 Units**

**Prerequisite(s):** MATH 151 F or MATH 151 HF, with a grade of C or better

72 hours lecture per term. This Honors-enhanced second semester calculus course covers differential equations, applications of integration, integration techniques, improper integrals, sequences and series, conics, parametric equations, and polar coordinates. Graphing calculators will be used for selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 220)

**MATH 170 F Discrete Structures 4 Units**

**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F, with a grade of C or better, and MATH 142 F, with a grade of C or better

**Advisory:** MATH 151 F or MATH 151HF.

72 hours lecture per term. This course covers fundamental topics for Computer Science such as logic, proof techniques, sets, introduction to computer programming, basic counting rules, relations, functions and recursion, graphs and probability trees. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 160)

**MATH 171 F Discrete Mathematics 4 Units**

**Prerequisite(s):** MATH 141 or MATH 141HF or MATH 143 F, and MATH 142 F with a grade of C or better, or equivalent or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This is one of two courses in fundamental discrete mathematical concepts and techniques needed in computer-related disciplines. The topics covered include logic, truth tables, Boolean algebra, logic circuits, elementary set theory, functions, relations, proof techniques, combinatorics, elementary probability, and recurrence relations. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MATH 172 F Graph Theory and Linear Algebra 4 Units**

**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F, and MATH 142 F, with a grade of C or better or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This is one of two courses in fundamental discrete mathematical concepts and techniques needed in computer related disciplines. Topics include the theory of graphs, trees, finite state machines, and linear algebra including matrix operations, eigenvalues, vector spaces, linear transformations, and inner product spaces. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MATH 203 F Mathematics for Future Elementary Teachers 3 Units**

**Prerequisite(s):** MATH 100 F or MATH 120 F or MATH 121 F or MATH 120HF or MATH 129 F or MATH 130 F or MATH 141 F or MATH 143 F or MATH 141HF or MATH 142 F or MATH 151 F or MATH 151HF or MATH 152 F or MATH 152HF or MATH 170 F or MATH 171 F or MATH 172 F or MATH 251 F or MATH 252 F or MATH 253 F or MATH 255 F or MATH 260 F, with a grade of C or better.

54 hours lecture per term. This course is designed for prospective elementary teachers. Topics covered include: problem-solving techniques, whole numbers and numeration, set theory, elementary number theory, integers, rational numbers, ratios, proportions, decimals, and percents. The course includes instruction delivery design and activity-based explorations. (Degree Credit) (CSU) AA GE

**MATH 251 F Multivariable Calculus (formerly MATH 250AF) 4 Units**

**Prerequisite(s):** MATH 152 F or MATH 152HF, with a grade of C or better

72 hours lecture per term. This is a third semester course in calculus covering solid analytic geometry, vectors in three dimensions, vector calculus, differential calculus of functions of several variables, multiple integration, vector fields and theorems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 230)

**MATH 252 F Linear Algebra and Differential Equations (formerly MATH 250BF) 4 Units**

**Prerequisite(s):** MATH 251 F with a grade of C or better

72 hours lecture per term. This is a fourth semester calculus course covering matrices, determinants, vector spaces, ordinary differential equations of the first order, linear second-order differential equations, power series and numerical solutions, and Laplace transformations. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MATH 253 F Additional Topics in Linear Algebra (formerly MATH 250CF) 2 Units**

**Corequisite(s):** MATH 252 F with a grade of C or better.

36 hours lecture per term. This course completes the introduction to Linear Algebra begun in MATH 252 F. Topics covered include linear transformations and their properties, the Dimension-sum theorem, matrices of linear transformations, inner product spaces and their properties, orthogonality, the Gram-Schmidt process, diagonalizability of symmetric matrices, and simplifying quadratic forms. (Degree Credit) (CSU) (UC) AA GE

**MATH 255 F Linear Algebra 3 Units**

**Prerequisite(s):** MATH 152 F or MATH 152HF, with a grade of C or better

54 hours lecture per term. This course develops the techniques and theory needed to solve and classify systems of linear equations. Solution techniques include row operations, Gaussian elimination, and matrix algebra. Properties of vectors in two and three dimensions are investigated, leading to the notion of an abstract vector space. Vector space and matrix theory are presented including topics such as inner products, norms, orthogonality, eigenvalues, eigenspaces, and linear transformations. Selected applications of linear algebra are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 250)

**MATH 260 F Ordinary Differential Equations 3 Units**

**Prerequisite(s):** MATH 152 F or MATH 152HF, with a grade of C or better

**Advisory:** MATH 251 F.

54 hours lecture per term. This course is an introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. This course introduces the theoretical aspects of differential equations, including establishing when solution(s) exist, and techniques for obtaining solutions, including series solutions and singular points, Laplace transformations and linear systems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 240)



**MATH 290 F Pure Mathematics Seminar** **2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This course is structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems in pure/theoretical mathematics such as real analysis, complex analysis, geometry, topology, number theory, logic, experimental mathematics, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. MATH 290 F and MATH 290HF differ from other Mathematics Seminars in that the topics are exclusively devoted to theoretical mathematics and proofs in it. Seminar courses in mathematics can be taken in any order. (Degree Credit)(CSU) (UC Review required)

**MATH 290HF Honors Pure Mathematics Seminar** **2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This Honors-enhanced courses offers students pure mathematics seminars which are structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems in pure/theoretical mathematics such as real analysis, complex analysis, geometry, topology, number theory, logic, experimental mathematics, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. MATH 290 F and MATH 290HF differ from other Mathematics Seminars in that the topics are exclusively devoted to theoretical mathematics and proofs in it. Topics assigned to honors students will emphasize additional rigor and depth, and honors students will participate in local, regional, and/or national competitions and conferences in mathematical science. Seminar courses in mathematics can be taken in any order. (Degree Credit) (CSU) (UC Review required)

**MATH 291 F Applied Mathematics Seminar** **2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. Historically, covered topics are new each time this course is offered and taught topics are never repeated, to ensure currency. This course is structured in order to engage students in applied mathematics topics such as numerical analysis, dynamical systems, cosmology, finance, mathematical biology, inverse problems, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. (Degree Credit) (CSU) (UC Review required)

**MATH 291HF Honors Applied Mathematics Seminar** **2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This Honors-enhanced course will engage students in applied mathematics topics such as numerical analysis, dynamical systems, cosmology, finance, mathematical biology, inverse problems, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. (Degree Credit) (CSU) (UC Review required)

**MATH 295 F General Mathematics Seminar** **2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better assessment through the college multiple measures placement processes.

36 hours lecture per term. This course is structured in order to engage students in a diverse number of dynamical mathematical subjects, including cutting-edge unsolved problems, abstract, interdisciplinary, computational, and experimental mathematics, mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. Topics are of varying rigor and depth, depending on progress in the field and the abilities of the participants. (Degree Credit) (CSU) (UC Review required)

**MATH 295HF Honors General Mathematics Seminar** **2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This Honors-enhanced course offers math seminars which are structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems, abstract, interdisciplinary, computational, and experimental mathematics, mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. An enriched approach in this course is designed for students in the Honors program. Topics are of varying rigor and depth, depending on progress in the field and the abilities of the participants. (Degree Credit) (CSU) (UC review required)

**MATH 299 F Mathematics Independent Study** **1 Unit**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

18 hours lecture or scheduled conferences per term. This course is for able students who wish to increase their knowledge of multiple areas of pure and/or applied mathematics through individual study and small group conferences. (Degree Credit) (CSU) (UC review required)

## Metallurgy (METL)

**METL 192 F Fundamentals of Metallurgy** **3 Units**

54 hours lecture per term. This course is a survey of the field of metallurgy designed to familiarize the technical student with the production, use, and testing of metals and other materials. This course reviews the relationships between the properties of metals/alloys as well as other materials and how they relate to design and manufacturing industries. This course is applicable for students in all technical fields. (CSU) (Degree Credit)

## Microbiology (MICR)

**MICR 220 F Medical Microbiology** **4 Units**

**Advisory:** Biological sciences lab course

54 hours lecture and 54 hours lab per term. This course focuses on the study of microorganisms that pose significant health problems at both the personal and community level. Special attention is given to the topics of infectious disease transmission, immunology, sanitation and prophylaxis. Principles of applied microbiology are stressed. Recommended for students planning to enter two-year allied health professional programs. (CSU) (Degree Credit) AA GE, CSU GE

**MICR 262 F General Microbiology 5 Units**

**Prerequisite(s):** CHEM 101 F or equivalent with a grade of C or better and a biological science lab course that includes cellular structure/function (such as ANAT 231 F, BIOL 101 F, BIOL 170 F, etc.) with a grade of C or better.

) 54 hours lecture and 108 hours lab per term. This course studies the morphology, taxonomy, metabolism, and molecular genetics of microbes with emphasis on bacteria, protozoa, viruses, helminths and fungi. The role of microorganisms in the disease process, epidemiology, immunology and chemotherapeutic control measures, environmental impact and industrial application are discussed. Laboratory exercises focus on the development of basic techniques in aseptic handling, visualization, and quantification of microbes. Other lab exercises include sampling water and soil for medically or environmentally important microbes, assessing antibiotic sensitivity, fluorescent microscopy, and immunoassays. This course is designed for students pursuing a career or major in microbiology and various allied health professions. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Mindfulness (MIND)

**MIND 101 F The Practice of Mindfulness and Self-Compassion 3 Units**

54 hours lecture per term. This course is designed to explore the theory, research and practices of mindfulness, self-compassion, compassion for others and the nature of well-being. This course addresses how mindfulness and compassion can manifest in the physiological, psychological, and societal realms. This course focuses on current research into mindfulness and compassion as well as developing experiential knowledge of these states through contemplative practices. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) AA GE, CSU GE

## Music (MUS)

**MUS 001 F Instrumental Performance Practicum 0.5-3 Units**

9-54 hours lab per term. This course is for students who wish to increase their knowledge of instrumental performance. Various topics will be offered. Consult the class schedule to verify credit for a particular semester.

**MUS 021 F Piano Pedagogy I 3 Units**

**Prerequisite(s):** Piano Audition

54 hours lecture and 18 hours lab per term. This course is designed for those interested in starting or continuing a career in piano teaching. The emphasis is on evaluating various pedagogical methods and skills for teaching beginning and elementary level students. Class activities include examining current piano method books, studio policy, business law, communication skills, networking, lectures, presentations and guest speakers. Letter Grade or Pass/No Pass option.

**MUS 022 F Piano Pedagogy II 3 Units**

**Prerequisite(s):** Audition

54 hours lecture and 18 hours lab per term. This course is designed for those interested in starting or continuing a career in piano teaching. Students will evaluate various pedagogical methods and skills for teaching intermediate and early advanced repertoires. Class activities include peer-teaching, piano competition, business etiquette, lesson plans, tutoring, adjudication, job interview, journal preparation, lectures and guest speakers. Letter Grade or Pass/No Pass option.

**MUS 070 F Musical Theatre Techniques 2 Units**

36 hours lecture per term. Students will participate in an in-depth analysis and application of the skills necessary for the performance in the styles of Musical Theatre, from audition to performance. Pass/No Pass only.

**MUS 081 F Music Tour Practicum 0.5-3 Units**

0-54 hours lecture and 0-108 hours lab per term. This course is for students who wish to increase their knowledge and skills in a practical concert tour. This class will involve the students in the preparation, management, and performance venues appropriate for the genre. Various topics will be offered. Unit credit may range from .5 to 3 units in any given semester. Consult the class schedule to verify credit for a particular semester.

**MUS 100 F Music Laboratory 1-2 Units**

54-108 hours lab per term. For each 54 hours beyond the music requirements that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room Suite 1114, one unit of credit will be granted. All hours must be verified by computer sign in. Pass/No Pass only. Open Entry/Open Exit. (CSU) (Degree Credit)

**MUS 101 F Music Fundamentals 3 Units**

54 hours lecture per term. This course is designed for the person whose music reading skills are non-existent or very limited. Emphasis is upon learning by tapping rhythm patterns and singing melodic materials, but includes enough basic music terminology, rhythm and pitch notation, intervals, scales, meter and key signatures to make this possible. This course is open to all students but should be of special interest to prospective music majors, church choir members, and others who want to develop skills in music reading and fundamentals of music theory. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**MUS 102 F Introduction to College Musicianship (formerly Music Reading) 1 Unit**

**Corequisite(s):** MUS 106 F with a grade of C or better.

Concurrent 18 hours lecture and 18 hours lab per term. This is an introductory course in college-level ear-training, sight singing, and musicianship skills for the music major. This course includes developing melodic and rhythmic performance skills as well as melodic and rhythmic dictation. (Degree Credit) (CSU) (UC) (C-ID: MUS 110)

**MUS 103 F Beginning Musicianship 1 Unit**

**Prerequisite(s):** MUS 106 F with a grade of C or better

**Advisory:** MUSA 131 F

Corequisite: MUS 107 F with a grade of C or better. 36 hours lecture per term. This is the first course in ear-training, sight singing, and musicianship skills for the music major. It includes developing melodic and rhythmic performance skills as well as melodic, harmonic, and rhythmic dictation. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 125)

**MUS 104 F Intermediate Musicianship 1 Unit**

**Prerequisite(s):** MUS 103 F with a grade of C or better

**Advisory:** MUSA 131 F

Corequisite: MUS 109 F with a grade of C or better. 36 hours lecture per term. This course is a continuation of MUS 103 F. It includes the development, at increasingly more difficult levels of melodic and rhythmic performance skills as well as melodic, harmonic, and rhythmic dictation. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 135)

**MUS 106 F Introduction to College Music Theory 3 Units**

**Prerequisite(s):** MUS 101 F with a grade of C or better.

**Advisory:** MUSA 131 F

54 hours lecture per term. This course is designed as the entry-level music theory class for music majors, this course includes basic music terminology, rhythm and pitch notation, clefs, scales, intervals, triads (and inversions), and seventh chords. Basic keyboard will also be introduced, along with a concise outline of the major style periods of music history. The ability to read music is strongly recommended and desirable. This course provides essential background for more advanced courses in music theory. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: MUS 110)

**MUS 107 F Music Theory I (formerly Harmony) 3 Units****Prerequisite(s):** MUS 102 F and MUS 106 F with a grade of C or better**Advisory:** MUSA 131 F

Concurrent Corequisite: MUS 103 F with a grade of C or better. 54 hours lecture per term. This course is the second course in music theory for music majors and includes four-part writing, cadences, non-harmonic tones, seventh chords, chord inversions, figured bass symbols, and diatonic chord progressions. (CSU) (UC) (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: MUS 120)

**MUS 108 F Introduction to Music Technology 2 Units**

36 hours lecture per term. This course covers and explores the fundamental vocabulary, methods, concepts and devices used in contemporary music production and related media fields, including sound fundamentals, consumer audio equipment, personal computers and software, recording studios, electronic music, audio-visual productions, trade publications, relevant conventions, and employment opportunities. (CSU) (Degree Credit)

**MUS 109 F Music Theory II (formerly MUS 107BF Harmony II) 3 Units****Prerequisite(s):** MUS 107 F with a grade of C or better**Advisory:** MUSA 131 F

Concurrent Corequisite: MUS 104 F with a grade of C or better. 54 hours lecture per term. This course follows MUS 107 F in the music theory sequence. It includes secondary dominants, modulation to closely related keys, melodic structure (phrase and period), species counterpoint, and an introduction to formal structure (binary, ternary and compound). (Degree Credit) (CSU) (UC) (C-ID: MUS 130)

**MUS 110 F Electronic Music I: Beginning Music Production 3 Units****Prerequisite(s):** MUS 108 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course covers the history of electronic music, the classical tape lab, and the analogue voltage controlled synthesizer, as well as the fundamentals of electronic music theory and techniques for instrument synthesis and sound design. (CSU) (Degree Credit) AA GE, CSU GE

**MUS 112 F The Music Business 2 Units**

36 hours lecture per term. This course provides an introduction to intellectual property law, copyright forms, and agreements between songwriter, publisher, recording artist, producer, and personal management. This course takes an extensive look at the history of music business and how proof of authorship is possible. This course also explores the business dynamics of the music and entertainment industries. (CSU) (Degree Credit)

**MUS 113 F Jazz History - An Appreciation 3 Units**

54 hours lecture per term. This course provides a historical study of jazz music, America's only original musical art form. The focus will be on developing for the student an appreciation and understanding of the music with secondary emphasis on the historical and cultural conditions which influenced each era of jazz music: Dixieland, Swing, Cool Jazz, Bebop, Free jazz, and Fusion. Active directed listening will be the primary activity in the classroom. Out-of-class activities will include music, listening and concert attendance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**MUS 116 F Music Appreciation 3 Units**

54 hours lecture per term. This course is designed for the non-music major, and explores musical development from Middle Ages/Renaissance to the present. Emphasis is on active, directed listening to music and the discussion of choral, orchestral, solo, opera, and chamber works. Out-of-class activities include music listening and concert attendance. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MUS 100)

**MUS 118 F Introduction to Opera 3 Units**

54 hours lecture and 18 hours lab per term. This course offers an Introduction to the standard operatic repertoire in terms of development of vocal style, dramatic structure, and performance tradition. This course emphasizes appreciation of the art of operatic singing, focusing on voice classification, vocal range and techniques, and dramatic values. Students are offered opportunities for attendance at operatic performances. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MUS 119 F History of Rock Music 3 Units**

54 hours lecture per term. This course presents a historical study of the music of a rock musician. The principal focus will be on the music with analysis, secondary emphasis is placed on the sociological, political, and economic conditions which so heavily influenced this musical genre's development. Listening Active, directed listening, will be the primary function activity in the classroom. Out-of-class activities will include music listening and concert attendance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**MUS 120 F Survey of Music History 3 Units**

54 hours lecture per term. This course is a survey of the history of western art music from antiquity through the twentieth century including the contributions of other cultures with selected readings, recordings, and score analysis. Emphasis is placed on cultural influences, performance practices, media, composers, and characteristics of each style period. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MUS 100)

**MUS 122 F Advanced Music Business 2 Units****Prerequisite(s):** MUS 112 F with a grade of C or better

This course builds on the information covered in and is meant to be sequential to MUS 112 F. This course covers the following topics in greater depth: artist management, marketing and promotion, venue management and promotion, music supervisor and music product sales and development. This course also explores new media and online methods for promotion and distribution. Guest speakers will appear according to availability. (CSU) (Degree Credit)

**MUS 124 F Recording Lab I - Beginning Techniques 3 Units****Prerequisite(s):** MUS 108 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course explores the fundamental concepts in audio recording technology, including lab business practices, microphones, mixers, signal processors, the sound field, monitors, recording and editing devices, synchronization, and production techniques. (CSU) (Degree Credit)

**MUS 125 F Recording Techniques Workshop for Performers 3 Units**

36 hours lecture and 54 hours lab per term. This course is designed for the music performer enrolled in a college performance ensemble that is involved in making a performance tape, CD, DVD or TV show. This course includes recording, use of click tracks, mike placement/set up, use of headphones, proper overdubbing techniques, lip syncing when needed and developing advanced lab performance skills. Enrollment in this class is available only to students who are enrolled in a college performing group or small ensemble that is recording during the term the class is being offered or as a Recording/Production Career Technical Education student. (CSU) (Degree Credit)

- MUS 156 F Beginning Jazz Improvisation - Instrumental** **1 Unit**  
*Advisory:* MUS 106 F.  
 18 hours lecture and 36 hours lab per term. This course will give students a working knowledge of reading music and the ability to play major scales up to three sharps and three flats from memory. This course is designed for the beginning instrumental musician with an emphasis upon techniques of rhythmic, melodic and harmonic improvisation. Students will learn the art of constructing a melodic solo that is rhythmically and harmonically appropriate. (CSU) (UC) (Degree Credit)
- MUS 170 F Opera Workshop** **1 Unit**  
*Advisory:* Audition.  
 18 hours lecture and 18 hours lab per term. This course is an in-depth analysis of the musical, linguistic, and stylistic skills necessary for the learning and memorization of operatic repertoire. Emphasis is placed on music preparation for the Opera Production Performance. Course may be taken four times for credit. (CSU) (Degree Credit)
- MUS 171 F Opera Production Performance** **2 Units**  
*Advisory:* Students are admitted by audition.  
 18 hours lecture and 54 hours lab per term. This course is an in-depth analysis and application of the skills necessary for the performance in the styles of opera theatre from audition to performance, with an emphasis on blocking/acting, character development. This course may be taken four times for credit. (Degree Credit) (CSU)
- MUS 172 F Opera Theatre Workshop** **2 Units**  
*Advisory:* Audition  
 18 hours lecture and 54 hours lab per term. This course is an in-depth analysis and application of the skills necessary for the performance in the styles of opera theatre from audition to performance. Course may be taken four times for credit. (Degree Credit) (CSU)
- MUS 180 F Collegiate Chorale** **1 Unit**  
*Advisory:* Audition  
 18 hours lecture and 36 hours lab per term. This course will cover standard choral literature which will be rehearsed and performed with an emphasis on basic choral techniques. This course is open to all students with limited or no singing experience. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 181 F Women's Chorale** **1 Unit**  
*Advisory:* Audition  
 18 hours lecture and 36 hours lab per term. This is a performing group which performs traditional choral music for treble voices in styles from the Baroque, Classical, Romantic, and Contemporary periods. This course is open to students with limited or no singing experience. Course may be taken four times for credit. (CSU) (UC) (C-ID: MUS 180)
- MUS 196HF Honors Creative Arts - Music** **3 Units**  
 54 hours lecture per term. This Honors-enhanced course explores the nature of creativity through exposure to the performing arts, literature and the fine arts. Honors students will make independent investigation into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students are required to attend museums, concerts and theatrical performances. Students who receive credit in this course may not receive credit in THEA 196HF or ART 196HF. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- MUS 203 F Music Theory III (formerly Counterpoint)** **3 Units**  
*Prerequisite(s):* MUS 109 F with a grade of C or better  
*Advisory:* MUSA 131 F  
 Corequisite: MUS 204 F with a grade of C or better. This course introduces formal analysis of 18th century forms (Sonata and Rondo) and explores, through analysis and writing, modal borrowing, Neapolitan and augmented sixth chords, 9th, 11th, and 13th chords, and altered dominant chords. (Degree Credit) (CSU) (UC) (C-ID: MUS 140)
- MUS 204 F Advanced Musicianship** **1 Unit**  
*Prerequisite(s):* MUS 104 F with a grade of C or better  
*Advisory:* MUSA 131 F  
 Corequisite: MUS 203 F with a grade of C or better. 36 hours lecture per term. This course is a continuation of MUS 104 F. It includes the development of, at increasingly more difficult levels, melodic and rhythmic sight singing, along with melodic, harmonic, and rhythmic dictation. (Degree Credit) (CSU) (UC) (C-ID: MUS 145)
- MUS 205 F Pop and Commercial Music Theory** **3 Units**  
*Prerequisite(s):* MUS 109 F with a grade of C or better  
 Concurrent Corequisite: MUS 206 F with a grade of C or better. 54 hours lecture per term. This advanced music theory class provides an intensive study of harmonic material as used in popular music and jazz. This course includes the study of chord progressions, substitutions, harmonic alterations and musical form. Special attention is paid to great American composers such as Duke Ellington and Cole Porter. (Degree Credit) (CSU) (UC)
- MUS 206 F Pop and Commercial Musicianship** **1 Unit**  
*Prerequisite(s):* MUS 104 F with a grade of C or better  
 Corequisite: MUS 205 F with a grade of C or better. 36 hours lecture per term. This course is designed to enhance the student's aural skills through several different approaches to pop, jazz and commercial music. The course includes drills and exercises in three areas: singing of jazz-related scales and arpeggios, basic conducting skills and the transcription of pop harmony centered upon the music of the Beatles. (Degree Credit) (CSU) (UC) (C-ID: MUS 155)
- MUS 207 F Pop/Commercial Arranging/Composing** **3 Units**  
*Prerequisite(s):* MUS 205 F with a grade of C or better  
 54 hours lecture per term. This course provides analysis of contemporary and traditional songs and the study of techniques of scoring for various combinations of voices and instruments. This course places emphasis on using modern orchestration and scoring projects to be performed and recorded for class members. (CSU) (Degree Credit)
- MUS 208 F Music Copying and Notation Software** **2 Units**  
*Prerequisite(s):* MUS 106 F with a grade of C or better  
 36 hours lecture per term. This is a vocational, career-oriented course that covers the preparation of professional-quality manuscripts, vocal scores, and instrumental scores as well as transposition of instruments and copying from full instrumental scores. This course is open to all music majors, music teachers, or performers. (CSU) (Degree Credit)
- MUS 224 F Recording Studio II - Intermediate Techniques** **3 Units**  
*Prerequisite(s):* MUS 124 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course provides an introduction to digital audio concepts, recorders, synchronization, and the digital audio workstation. Students will be assigned projects in the recording facilities. (CSU) (Degree Credit)

- MUS 226 F Recording Studio III - Advanced Techniques** 3 Units  
*Prerequisite(s)*: MUS 224 F with a grade of C or better or Audition  
 36 hours lecture and 72 hours lab per term. This class is the final of three sequential recording studio classes. Student project work focuses on advanced recording techniques necessary to record and organize recording sessions for large choirs, ensembles and orchestras. (Degree Credit) (CSU)
- MUS 256 F Advanced Jazz Improvisation - Instrumental** 1 Unit  
*Prerequisite(s)*: MUS 156 F with a grade of C or better or Audition  
 18 hours lecture and 36 hours lab per term in the Rhythm Laboratory, recording Studio, or Music Library with emphasis upon intermediate techniques of rhythmic, melodic, and harmonic improvisation. (CSU) (UC) (Degree Credit)
- MUS 259 F Steel Drum Ensemble** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 18 hours lab per term. Lectures and demonstrations are combined with student performances that provide information and opportunities toward the goal of live musical performances in the Steel Pan Ensemble. Emphasis will be placed on sight reading and improvisation of music from Trinidad, modern jazz, and classical arrangements. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- MUS 260 F Guitar Ensemble** 1 Unit  
*Advisory*: Audition  
 18 hours lecture and 18 hours lab per term. Students will rehearse and perform original and transcribed guitar ensemble literature from the Renaissance to contemporary styles; performances are required of all students. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 185)
- MUS 261 F String Ensemble** 1 Unit  
*Advisory*: Audition  
 18 hours lecture and 18 hours lab per term. This course includes the rehearsal and performance of standard and current string ensemble literature. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 262 F Woodwind Ensemble** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 18 hours lab per term. This class will consist of study, rehearsal, and performance of Woodwind Ensemble music. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 263 F Brass Ensemble** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 36 hours lab per term. This course is based upon performance of brass ensemble literature from all major stylistic periods in music. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 264 F Percussion Ensemble** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 36 hours lab per term. This course explores the rehearsal and public performance of standard percussion ensemble literature. This course is designed for music majors, but is open to all students. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 265 F Piano Ensemble** 1 Unit  
*Prerequisite(s)*: MUSA 136 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is designed to enhance ensemble-playing skills by focusing on rehearsal technique, balance, and hand coordination. Emphasis is on performing standard and current duo pieces, four-hand literature, and pieces requiring more than two pianos and/or other instruments. Participation in piano ensemble recital and performances is required. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 266 F Jazz Combo** 1 Unit  
*Prerequisite(s)*: Audition  
*Advisory*: MUS 106 F - students should be able to read music notation and play major scales up to four sharps and four flats from memory.  
 18 hours lecture and 36 hours lab per term. This course provides a combination of lectures and demonstrations with student performances, recordings, and tours are used to increase understanding and appreciation of many jazz genres and their relationship to modern American music. The ability to play suitable instruments is required. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 268 F Jazz Guitar Ensemble** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 18 hours lab per term. Lecture/demonstrations are combined with student performances to provide opportunities for learning and growth in the area of jazz guitar. Particular emphasis is placed on the application of advanced guitar techniques to standard jazz literature. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 269 F Alternative Jazz Lab Ensemble** 1 Unit  
*Prerequisite(s)*: Ability to play suitable instruments  
*Advisory*: MUS 106 F or basic skills on major instruments  
 18 hours lecture and 36 hours lab per term. This course combined with student performances is used to increase understanding and appreciation of many musical genres including Fusion, Latin Rock, Pop, Salsa, Indiana, Afro-Cuban music and their relationship to modern American composition. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 270 F Electronic Music Ensemble** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 36 hours lab per term. This course allows students to learn to play collaborative works suitable for electronic music and synthesizer techniques. Develop interactive playing techniques with Ableton Live, Tactile controllers and electronically-modified acoustic instruments to realize avant-garde, techno-pop and dance music as well as improvised pieces with multi-media content. Course may be taken four times for credit. (Degree Credit) (C-ID: MUS 180)
- MUS 271 F Fullerton College Symphony** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture, 36 hours lab and 18 arranged hours in rehearsals, studio recording, and concerts. This course includes the rehearsal and public performance of standard orchestral literature both on campus and in surrounding communities. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)

- MUS 273 F Concert Band** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 36 hours lab per term. This course will rehearse and perform standard band literature. Public performances will be held at various locations. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE
- MUS 274 F Fullerton College Symphonic Winds** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 hours arranged in rehearsals, recordings, and concerts per term. This course will include rehearsals and performance of standard band literature. The performances will take place on campus and in the community. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)
- MUS 275 F Pep Band** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 36 hours lab per term. This course creates a performance opportunity for music majors to provide musical support to the Fullerton College Athletics program. The band will perform during football and basketball games and for special events. Emphasis is placed upon student leadership, and the performance literature is drawn from contemporary and traditional band sources. The emphasis of this course is on modern Pep Band ensemble literature. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- MUS 276 F Jazz Band** **1 Unit**  
**Prerequisite(s):** Audition  
**Advisory:** MUS 106 F and concurrent enrollment in MUS 274 F  
 18 hours lecture and 36 hours lab per term. This is a performing ensemble including studio recording, and concerts. Rehearsal, recording and concert performance of standard and current jazz fusion music. Student composition/arrangements encouraged. Open to all students by audition. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 277 F Jazz Lab Band** **1 Unit**  
**Prerequisite(s):** Audition  
**Advisory:** Concurrent enrollment in MUS 274 F  
 18 hours lecture and 36 hours lab per term. This course explores standard and current jazz/fusion and swing big band music. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 281 F Concert Choir** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 hours arranged lab per term in additional rehearsals, studio recordings, and concerts. This course covers standard choral literature which will be rehearsed and performed with an emphasis on early western music of the Renaissance and Baroque periods. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)
- MUS 282 F Fullerton College Master Chorale** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 hours arranged in additional rehearsals, recordings, and concerts. This course is a performance oriented class and incorporates traditional choral literature of a sacred and secular nature. There will be at least one major work performed per year on campus and in the community. This course is open to students and to all residents of the North Orange County Community College District. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)
- MUS 284 F Advanced Topics in Music** **0.5-3 Units**  
 18-54 hours lecture and 18-54 hours lab per term. This course is designed to meet the various needs of music areas that required advanced training and continuing education as well as provide professional growth for persons employed in the music business, production, recording, and performing fields. This course will be offered in modules of advanced topics. Unit credit may range from .5 to 3 units per module. Consult the class schedule to verify topic areas and credit offered for each topic. (Degree Credit)
- MUS 285 F Chamber Singers** **1 Unit**  
**Advisory:** Audition  
 18 hours lecture and 36 hours lab per term. In this course, choral chamber music literature will be rehearsed and performed on campus in surrounding communities and schools and occasionally on tours. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 286 F Vocal Jazz Lab Singers** **1 Unit**  
**Advisory:** Audition  
 This performance ensemble uses 2-3 part vocal jazz literature to teach the fundamentals of jazz harmony, blend, style, interpretation, and improvisation within a vocal group setting. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- MUS 287 F Vocal Jazz Ensemble** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 hours arranged in rehearsals, studio recordings, workshops, festival competitions and concerts. The students in this course will rehearse and perform standard and current music from the Vocal Jazz genre. The vocalists will be accompanied by a small instrumental ensemble. There will be a secondary emphasis upon vocal improvisation in the scat style. Student compositions and arrangements are encouraged. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 291 F Electronic Music II - Intermediate Music Production** **3 Units**  
**Prerequisite(s):** MUS 110 with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course explores the procedures, instruments, and techniques used in a contemporary DAW/MIDI synthesizer studio and the use of sequencers, editor/librarians, intelligent arrangers, algorithmic composers, and non-linear editing in a digital audio workstation. Students will do scoring projects and acquire advanced techniques in Digital Performer and Protools. Other DAW's may include Reason, Logic and Ableton Live. (CSU) (Degree Credit)
- MUS 292 F Electronic Music III - Advanced Music Production** **3 Units**  
**Prerequisite(s):** MUS 110 F with a grade of "C" or better  
 36 hours lecture and 54 hours lab per term. This course offers advanced music production training in Logic Pro and Ableton Live. It represents the last class course in a sequence of three Electronic Music classes dedicated to the teaching of Advanced Music creation and production skills using state of the art Digital Audio Workstations to produce music for Film, TV and Interactive Media. (CSU) (Degree Credit)
- MUS 298 F Music Internship** **1-3 Units**  
 54-162 hours lab per term. This course is designed to enable the music student to understand and demonstrate competence in a professional recording/production work environment through the combination of extended classroom learning and the interaction of a professional supervisor. It is the responsibility of the student to pursue their own internship opportunity. (Degree Credit) (CSU)

**MUS 299 F Music Independent Study** 1 Unit  
**Advisory:** High scholarship music major evidenced by portfolio, advanced level performance, or instructor referral.

54 hours independent study per term. This course is for advanced students who wish to pursue a particular area of music through individual study. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required)

## Music-Applied (MUSA)

**MUSA 100 F Introduction to Music Laboratory** 1-2 Units  
**Corequisite(s):** MUSA 200 F with a grade of C or better.

54 to 108 hours lab per term in the Computer Laboratory, Music Listening Library, or Practice Room Suite. This course is taken in conjunction with MUSA and includes the private lessons, directed learning time (coaching), and practice time required for that class. Pass/No Pass only. (CSU) (Degree Credit)

**MUSA 101 F Beginning Music Lab** 1-2 Units  
**Prerequisite(s):** MUSA 100 F with a grade of Pass or C or better.

Corequisite: MUSA 200 F with a grade of Pass or C or better. 54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room, one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the second semester of MUSA 200 F. Open Entry/Open Exit. Pass/No Pass only. (CSU) (Degree Credit)

**MUSA 102 F Intermediate Music Laboratory** 1-2 Units  
**Prerequisite(s):** MUSA 101 F with a grade of Pass

Corequisite: MUSA 200 F with a grade of Pass. 54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room, one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the third semester of MUSA 200 F. Pass/No Pass only. (CSU) (Degree Credit)

**MUSA 103 F Advanced Music Laboratory** 1-2 Units  
**Prerequisite(s):** MUSA 102 F with a grade of C or better

Corequisite: MUSA 200 F with a grade of Pass. 54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room Suite one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the fourth semester of MUSA 200 F. Open Entry/Open Exit. Pass/No Pass only. (CSU) (Degree Credit)

**MUSA 104 F Introduction to Concert Hour** 1 Unit

18 hours lecture per term. This course is designed for the first semester music major, providing the student with opportunities to expand their knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Fullerton College Music Department concerts and the preparation of concert reports. This course is required of all music majors but open to all students. (CSU) (Degree Credit) AA GE

**MUSA 105 F Beginning Concert Hour** 1 Unit  
**Prerequisite(s):** MUSA 104 F with a grade of C or better

18 hours lecture per term. This course is designed for the second semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Music Department concerts and the preparation of concert reports. (CSU) (Degree Credit)

**MUSA 106 F Intermediate Concert Hour** 1 Unit  
**Prerequisite(s):** MUSA 105 F with a grade of C or better

18 hours lecture per term. This course is designed for the third semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Music Department concerts and the preparation of concert reports. (CSU) (Degree Credit)

**MUSA 107 F Advanced Concert Hour** 1 Unit  
**Prerequisite(s):** MUSA 106 F with a grade of C or better

18 hours lecture per term. This course is designed for the fourth semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Fullerton College concerts and the preparation of concert reports. (CSU) (Degree Credit)

**MUSA 110 F Fundamentals of Voice Training for Non-Majors** 1 Unit  
**Advisory:** Audition.

18 hours lecture and 18 hours lab per term. This course is the study of fundamentals of singing techniques in a class situation. Topics include instruction in tone production, breath control, pronunciation, and choice of song literature. Out of class time includes 1 hour of practice time in Practice Room per week and preparation for recitals. Open to all students and intended for avocational and inexperienced singers. (Degree Credit) (CSU) (UC)

**MUSA 111 F Beginning Voice** 1 Unit  
**Advisory:** Audition.

18 hours lecture and 18 hours lab per term. This course is an entry level class for inexperienced singers who wish to explore the Voice Major. Providing a study of basic vocal techniques, the course explores tone production, breath control, pronunciation, and choice of song literature. Required out of class activities include one hour practice in Practice Room per week and participation in recitals. Field trips may be required outside of regularly scheduled class times. (Degree Credit) (CSU) (UC)

**MUSA 112 F Intermediate Voice I** 1 Unit  
**Advisory:** MUSA 110 F or MUSA 111 F or Audition.

18 hours lecture and 18 hours lab per term. This course, which provides a study of vocal literature and techniques in a class situation, emphasizes individual progress in tone production, breath control and diction. Repertoire is primarily 18th and 19th century Italian songs and arias. The course is designed for the voice major not yet qualified for MUSA 200 F or the Advanced Voice classes and for promising non-majors. Out of class activities include one hour of practice per week in Practice Room Suite and preparation for recitals. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC)

- MUSA 113 F Intermediate Voice II** **1 Unit**  
*Advisory:* MUSA 112 F or Audition.  
 18 hours lecture and 18 hours lab per term. This course, which is a study of vocal literature and techniques, emphasizes individual progress in tone production, breath control and diction. The course is designed for the more advanced non-major, or the voice major not yet qualified for Applied Voice-Individual Instruction or Advanced Voice. This course continues to build on the skills learned and practiced in MUSA 112 F. Repertoire is primarily 18th and 19th century Italian songs and arias. Out of class activities include one hour of practice per week in Practice room, and preparation for recitals. Field trips may be required outside of regularly scheduled class times. (Degree Credit) (CSU) (UC)
- MUSA 120 F Beginning Guitar** **1 Unit**  
 18 hours lecture and 18 hours lab per term. This course focuses on the fundamentals of playing the guitar: technique, note reading, scales, chords, simple picking and strumming patterns. The repertoire includes a wide variety of musical styles, from classical to rock. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC)
- MUSA 121 F Intermediate Guitar** **1 Unit**  
*Advisory:* MUSA 120 F.  
 18 hours lecture and 18 hours lab per term. This course is designed for the more advanced non-guitar major or the guitar major who is not yet qualified for Classical or Jazz Guitar, this course continues the study of guitar study from MUSA 120 F with emphasis on more advanced literature and techniques. Emphasis is placed on individual progress in execution and interpretation. (CSU) (UC)
- MUSA 130 F Introduction to Piano for Non-Music Majors** **1 Unit**  
 18 hours lecture and 18 hours lab per term. This course is designed for non-music majors whose piano skills are non-existent or very limited. It provides an introduction to the fundamentals of piano playing: posture, keyboard topography, note reading, 5-finger-pattern exercises, sight-reading, and piano repertoires. It is open to all students. Letter Grade/Pass/No Pass option. (CSU) (UC) (Degree Credit)
- MUSA 131 F Keyboard Skills I** **1 Unit**  
*Prerequisite(s):* MUSA 130 F with a grade of Pass or C or better  
*Advisory:* MUSA 136 F  
 18 hours lecture and 18 hours lab per term. This course is designed for music majors preparing for a university keyboard proficiency exam, this course is the entry-level keyboard musicianship class with emphasis on basic keyboard harmonization, hand independence, transposition, sight-reading, rhythm accuracy and elementary piano repertoires. (CSU) (UC) (Degree Credit)
- MUSA 132 F Keyboard Skills II** **1 Unit**  
*Prerequisite(s):* MUSA 131 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is a continuation of MUSA 131 F for music majors. It includes emphasis on basic keyboard harmonization using primary chord inversions, technique, transposition, accompaniment patterns, rhythm accuracy and late elementary/early intermediate piano repertoires. (CSU) (UC) (Degree Credit)
- MUSA 134 F Jazz Piano Technique and Repertoire I** **1 Unit**  
*Prerequisite(s):* MUSA 130 F with a grade of Pass or C or better or Audition  
 18 hours lecture and 18 hours lab per term. This is an introductory jazz piano course in which students will learn to improvise over the blues form using the blues scale, analyze standard tunes harmonically and play ii-V-i progression using shell voicings, Bud Powell shells and rootless voicings. (CSU) (UC) (Degree Credit)
- MUSA 136 F Beginning Piano Sight-Reading** **1 Unit**  
*Prerequisite(s):* MUSA 130 F with a grade of Pass or C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is designed for those majoring in piano whose sight-reading skill is almost nonexistent. Piano sight-reading strategies will include familiarity with keyboard topography, vertical and horizontal groupings of notes and recognition of rhythm patterns. Students will read simple arrangements of popular and famous tunes. Also recommended for those enrolled in MUSA 131 F. (CSU) (UC) (Degree Credit)
- MUSA 137 F Intermediate Piano Sight-Reading** **1 Unit**  
*Prerequisite(s):* MUSA 136 F with a C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is designed for piano majors and is a continuation of MUSA 136 F and includes reading various styles of intermediate-level solo piano repertoire, ensemble, accompaniments and reading chord symbol notation. (CSU) (UC) (Degree Credit)
- MUSA 140 F Introduction to Strings (formerly Introduction to Strings for Non-Majors)** **1 Unit**  
 18 hours lecture and 18 hours lab per term. This course is an exploratory study of the violin, viola, cello or string bass in a classroom situation. It presents the basic fundamentals of string technique and music reading. Since no previous experience is necessary, the course is open to all students. (CSU) (UC) (Degree Credit)
- MUSA 141 F Beginning Strings** **1 Unit**  
*Advisory:* MUSA 140 F.  
 18 hours lecture and 18 hours lab per term. This course is offered to majors and non-majors who wish to become familiar with the basic fundamentals of violin, viola, cello, and/or string bass techniques. Students are required to practice at least two hours per week. Emphasis is placed on sound production, articulation, and basic music sight reading and theory. In addition, more basic concepts of teaching methods are presented in order to help prepare those wishing to enter the teaching industry at the elementary and middle school levels teaching private or group string classes. (Degree Credit) (CSU) (UC)
- MUSA 142 F Intermediate Strings** **1 Unit**  
*Advisory:* MUSA 141 F.  
 18 hours lecture and 18 hours lab per term. This course teaches the intermediate fundamentals of violin, viola, cello, and/or string bass techniques; more intermediate-level string techniques are presented such as shifting, vibrato and tuning. (CSU) (UC)
- MUSA 150 F Introduction to Woodwinds for Non-Majors** **1 Unit**  
*Prerequisite(s):* Audition  
 18 hours lecture and 18 hours lab per term. This course offers an introduction to the flute, oboe, bassoon, clarinet, or saxophone in a class situation. No previous experience is necessary. This course is open to all students (CSU) (UC) (Degree Credit)
- MUSA 151 F Beginning Woodwinds** **1 Unit**  
*Prerequisite(s):* Audition  
 18 hours lecture and 18 hours lab per term. This course provides a challenging introduction to the study of flute, oboe, bassoon, clarinet, or saxophone in a class setting. Although this course is designed for music majors, it is open to all students. (CSU) (UC) (Degree Credit)



- MUSA 152 F Intermediate Woodwinds** 1 Unit  
**Prerequisite(s):** MUSA 150 F or MUSA 151 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is a study of Woodwind literature and techniques in a class situation. Emphasis is placed on individual progress in tone production, breath support, technique, and intonation. The course is designed for more advanced non-majors, or for music majors not yet qualified for advanced woodwinds. (CSU) (UC) (Degree Credit)
- MUSA 161 F Beginning Brass** 1 Unit  
 18 hours lecture and 18 hours lab per term. This course provides an introductory level study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Since no previous brass experience is necessary, it is open to all students. Students must provide their own instruments. (CSU) (UC) (Degree Credit)
- MUSA 162 F Intermediate Brass** 1 Unit  
**Prerequisite(s):** MUSA 161 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is an intermediate level study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Some prior experience in playing a brass instrument is necessary. Students must provide their own instruments. (CSU) (UC) (Degree Credit)
- MUSA 170 F Introduction to Percussion (formerly Introduction to Percussion for Non-Majors)** 1 Unit  
 18 hours lecture and 18 hours lab per term. This course is a study of the techniques and rhythmic theory needed to perform the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be identified and discussed. (CSU) (UC) (Degree Credit)
- MUSA 171 F Introduction to Drum Set** 1 Unit  
**Advisory:** MUSA 170 F.  
 18 hours lecture and 18 hours lab per term. This course will teach students the fundamentals of popular drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. The instructor will give group and individual instruction and present an overview of basic percussion technique, rhythmic theory and Jazz, Rock, Latin and Pop drumming styles. Students should be prepared to practice one half hour a day outside of class. (CSU) (Degree Credit)
- MUSA 172 F Intermediate Percussion** 1 Unit  
**Advisory:** MUSA 170 F.  
 18 hours lecture and 18 hours lab per term. This course is a continuation study of the techniques and rhythmic theory needed for intermediate level performance of the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be instructed and performed. (Degree Credit) (CSU) (UC)
- MUSA 173 F Intermediate Percussion - Drum Set** 1 Unit  
**Advisory:** MUSA 171 F.  
 18 hours lecture and 18 hours lab per term. Students will learn popular drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. Instructor will give group and individual instruction and present an overview of Jazz, Rock, Latin, and Pop drumming styles. Students should be prepared to practice one half hour a day, outside of class. (CSU) (UC) (Degree Credit)
- MUSA 191 F Intermediate Vocal Jazz Styling and Improvisation I** 1 Unit  
**Advisory:** Audition  
 18 hours lecture and 18 hours lab per term. This course is designed to give vocal students beginning training in jazz styling techniques, rhythmic and melodic improvisation, and the fundamentals of lead sheet writing. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library. Students should have prior training in the fundamentals of voice and music theory. (CSU) (UC) (Degree Credit)
- MUSA 192 F Intermediate Vocal Jazz Styling and Improvisation II** 1 Unit  
**Prerequisite(s):** MUSA 191 F with a grade of C or better  
 18 hours lecture and 18 hours lab per term. This course is designed to give vocal students intermediate training in jazz styling techniques, vocal improvisation, and basic lead sheet writing. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library. (CSU) (Degree Credit)
- MUSA 200 F Applied Music - Individual Private Study** 1 Unit  
**Advisory:** Audition  
 18 hours lecture per term. This course provides individual instruction in applied techniques and interpretation of musical literature. Participation in recitals, juries and performance evaluations are required. Areas of study include guitar, orchestral and band instruments, percussion, piano, and voice. Course may be taken four times for credit. (Degree Credit) (CSU) (UC review required) (C-ID: MUS 160)
- MUSA 201 F Advanced Applied Music - Master Class (formerly titled Advanced Applied Music - Individualized Private Study)** 1 Unit  
**Prerequisite(s):** MUSA 200 F with a grade of C or better  
 18 hours lecture per term. This course provides advanced individual instruction in applied techniques and interpretation of musical literature. Participation in recitals, juries and performance evaluations are required. Areas of study include guitar, orchestral & band instruments, percussion, piano, and voice. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)
- MUSA 202 F Applied Private Instruction** 1 Unit  
**Advisory:** Audition  
 This course offers individual instruction in applied techniques and interpretation of musical literature. Participation in recitals, juries, and performance evaluations is required. Instruments of study include guitar, orchestral instruments, piano, percussion, and voice. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)
- MUSA 203 F Advanced Applied Private Instruction** 1 Unit  
**Advisory:** MUSA 202 F and Audition.  
 18 hours lecture per term. This course offers individual instruction in advanced applied techniques and advanced interpretation of musical literature. Participation in recitals, juries, and performance evaluations is required. Instruments of study include guitar, orchestral instruments, piano, percussion, and voice. Course may be taken two times for credit. (Degree Credit) (CSU) (UC review required)
- MUSA 210 F Advanced Voice** 1 Unit  
**Advisory:** MUSA 112 F or Audition.  
 18 hours lecture and 18 hours lab per term. This course offers individual instruction in vocal techniques and interpretation of solo voice literature in a class situation. Emphasis is placed upon repertoire and public performance. Participation in recitals plus one hour practice per week is required. Designed for music majors but open to all students. Field trips may be required outside of regularly-scheduled times. (Degree Credit) (CSU) (UC)

- MUSA 211 F Advanced Voice-German Lieder** 1 Unit  
*Advisory:* MUSA 112 F or Audition  
 18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of German Lieder in a class situation, emphasizes repertoire and public performance. Out of class activities include one hour practice in the Practice Room per week and participation in recitals. Although designed for music majors, this course is open to all students. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- MUSA 212 F Advanced Voice-French Melodie** 1 Unit  
*Advisory:* MUSA 112 F or Audition  
 18 hours lecture and 18 hours lab per term. This course, which provides Individual instruction in vocal techniques and interpretation of French Melodie in a class situation, emphasizes learning and performing French repertoire. Out of class activities include one hour practice per week and participation in recitals. Although designed for music majors, this course is open to all students. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- MUSA 213 F Advanced Voice-Spanish Cancion** 1 Unit  
*Advisory:* MUSA 112 F or Audition.  
 18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of Spanish Canciones, emphasizes repertoire and public performance. Out of class activities include one hour practice in Practice Room per week and participation in recitals. Although designed for music majors this course is open to all students. (Degree Credit) (CSU) (UC)
- MUSA 214 F Advanced Voice-English and American Art Song** 1 Unit  
*Advisory:* MUSA 112 F or Audition  
 18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of English and American Art Songs in a class situation, emphasizes repertoire and public performance. Out of class activities include one hour practice in Practice Room per week and participation in recitals. Although designed for music majors, this course is open to all students. (CSU) (UC) (Degree Credit)
- MUSA 220 F Advanced Guitar I (formerly Classical Guitar: Renaissance to Baroque)** 1 Unit  
*Advisory:* MUSA 121 F.  
 18 hours lecture and 18 hours lab per term. This course is designed for music majors, this course provides intensive individual instruction in guitar techniques and interpretation of solo guitar literature. Emphasis on building repertoire and performing music from the Renaissance to Baroque periods. (Degree Credit) (CSU) (UC)
- MUSA 221 F Advanced Guitar II (formerly Classical Guitar: Classical to Contemporary)** 1 Unit  
*Advisory:* MUSA 121 F  
 18 hours lecture and 18 hours lab per term. This course is designed for music majors, this advanced class provides intensive individual instruction in guitar techniques and interpretation of solo guitar literature. Emphasis is placed on building repertoire and performing music from the Classical Music to Contemporary periods. (Degree Credit) (CSU) (UC)
- MUSA 223 F Jazz Guitar: Scales and Arpeggios** 1 Unit  
*Advisory:* MUSA 121 F  
 18 hours lecture and 18 hours lab per term. This course is designed to advance the student's ability in a variety of jazz guitar styles with specific emphasis on improvisation in a single-line (linear) style. Linear playing will explore both scales and arpeggios and their incorporation into improvised melodies over a variety of chord changes. Students should have at least intermediate playing skills (at least two years guitar playing experience) and some knowledge of music theory. Music reading is not necessary, but is advised. Previous exposure to playing jazz is not required. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- MUSA 224 F Jazz Guitar: Chords** 1 Unit  
*Advisory:* MUSA 121 F or by Audition  
 18 hours lecture and 18 hours lab per term. This class is designed to advance the student's ability in a variety of jazz guitar styles with specific emphasis on chord playing, which will be addressed in both accompaniment and solo playing. Students should have at least intermediate playing skills (2 years guitar playing experience) and some knowledge of music theory. Music reading is not necessary, but is advised, for success in this class. Previous exposure to playing jazz is not required. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- MUSA 231 F Keyboard Skills III** 1 Unit  
*Prerequisite(s):* MUSA 132 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course follows MUSA 132 F in keyboard musicianship sequence. Individualized instruction will focus on keyboard harmony using primary and secondary chords, introduction to basic score reading, transposing to concert pitch, rhythm, and early intermediate/intermediate piano repertoires including classical, blues, national and folk tunes. (CSU) (UC) (Degree Credit)
- MUSA 232 F Keyboard Skills IV** 1 Unit  
*Prerequisite(s):* MUSA 231 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab. This course is an advanced level in keyboard musicianship sequence. Rigorous individualized instruction will focus on keyboard harmony using secondary dominant chords, 3-voice choral score reading, specialized rhythm, intermediate to late intermediate standard repertoires, memorization, and self-critiquing skills. (CSU) (UC) (Degree Credit)
- MUSA 234 F Jazz Piano Technique and Repertoire II** 1 Unit  
*Prerequisite(s):* MUSA 134 F with a grade of C or better  
 18 hours lecture and 18 hours lab. This course, which is a continuation of MUSA 134 F for jazz piano majors, builds on playing standard jazz repertoire for solo piano and piano trio, jazz theory and practicing strategies. Students will learn to play and improvise over minor ii-V-i progression using shell and rootless voicings. (CSU) (UC) (Degree Credit)
- MUSA 236 F Advanced Piano: Baroque to Classical** 1 Unit  
*Prerequisite(s):* MUSA 137 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course provides individualized instruction and lecture on piano techniques and interpretation of baroque and classical piano repertoire for pianists. (CSU) (UC) (Degree Credit)
- MUSA 237 F Advanced Piano: Romantic to Contemporary** 1 Unit  
*Prerequisite(s):* MUSA 137 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This advanced class for piano majors studies Romantic to Contemporary keyboard literature and techniques. Emphasis will be on individual progress in building musical vocabulary, phrasing, articulations, technique, and interpretation. (CSU) (UC) (Degree Credit)

**MUSA 240 F Advanced Strings 1 Unit****Advisory:** MUSA 142 F.

18 hours lecture and 18 hours lab per term. This course, which follows MUSA 142 F, provides rigorous instruction for violin, viola, cello, and/or string bass techniques. Students are required to practice at least 2 hours per week. More advanced-level string techniques are presented, including higher fingerboard positions, double-stops, and more difficult key signatures for the string player. (CSU) (UC) (Degree Credit)

**MUSA 250 F Advanced Woodwinds I 1 Unit****Prerequisite(s):** MUSA 152 F with a grade of C or better or Audition.

18 hours lecture and 18 hours lab per term. Designed for the woodwind major, this course provides individual instruction in woodwind techniques and ensemble interpretation of solo woodwind literature in a class situation. Emphasis is on repertoire and public performance. Participation in recitals is required. Although the course is designed for Music Majors, it is open to non-majors as well. (CSU) (UC) (Degree Credit)

**MUSA 251 F Advanced Woodwinds II 1 Unit****Prerequisite(s):** MUSA 250 F with a grade of C or better or Audition.

18 hours lecture and 18 hours lab per term. For the advanced woodwind player, this course provides intensively individualized instruction in woodwind techniques and interpretation of solo woodwind literature in a class situation. Emphasis is on continuation of technical and repertoire development. One or more woodwind instruments may be explored in this course. Participation in public recitals is required. (CSU) (UC) (Degree Credit)

**MUSA 260 F Advanced Brass I 1 Unit****Prerequisite(s):** MUSA 162 F with a grade of C or better or Audition.

18 hours lecture and 18 hours lab per term. This course involves an advanced level instruction and study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Emphasis will be on technique, presentation, and execution of higher levels of repertoire. Designed for music majors but open to all students. Students must provide their own instruments. (CSU) (UC) (Degree Credit)

**MUSA 261 F Advanced Brass II 1 Unit****Prerequisite(s):** MUSA 260 F with a grade of C or better or Audition.

18 hours lecture and 18 hours lab per term. This course involves the highest level of advanced instruction and study of the trumpet, trombone, French horn, euphonium or tuba in a classroom situation. Emphasis will be on technique, presentation, and execution of the highest levels of repertoire. This course is designed for music majors but it is open to all qualified students. Students must provide their own instruments. (CSU) (Degree Credit)

**MUSA 270 F Advanced Percussion I 1 Unit****Advisory:** MUSA 172 F.

18 hours lecture and 18 hours lab per term. This course is a continuation study of the techniques and rhythmic theory needed for advanced level performance of the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be instructed and performed. (CSU) (UC) (Degree Credit)

**MUSA 271 F Advanced Percussion II 1 Unit****Advisory:** MUSA 173 F.

18 hours lecture and 18 hours lab per term. Students will learn advanced drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. The instructor will give group and individual instruction and present an overview of Jazz, Rock, Latin, and Pop drumming styles and their many subcategories. Students should be prepared to practice one half hour per day, outside of class. (CSU) (UC) (Degree Credit)

**MUSA 290 F Advanced Vocal Jazz Styling and Improvisation I 1 Unit****Prerequisite(s):** MUSA 192 F with a grade of C or better or Audition

18 hours lecture and 18 hours lab plus 4 hours arranged time in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and lead sheet writing on the latest notation computer software. Students will begin to compile a personal working songbook. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

**MUSA 291 F Advanced Vocal Jazz Styling and Improvisation II 1 Unit****Prerequisite(s):** MUSA 290 F with a grade of C or better

18 hours lecture and 18 hours lab plus 4 hours arranged time in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and fundamentals of arranging on the latest notation computer software. Students will add to their personal working songbook and begin to compile a promotional packet. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

**MUSA 292 F Advanced Vocal Jazz Styling and Improvisation III 1 Unit****Prerequisite(s):** MUSA 291 F with a grade of C or better

18 hours lecture and 18 hours lab plus 4 hours private coaching time per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and beginning arranging on the latest notation computer software. Students will continue building their personal working songbook and begin to compile a promotional packet. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

**MUSA 293 F Advanced Vocal Jazz Styling and Improvisation IV 1 Unit****Prerequisite(s):** MUSA 292 F with a grade of C or better

18 hours lecture and 18 hours lab and 4 hours in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and intermediate arranging on the latest notation computer software. Students will complete their personal working songbook and promotional packet for professional use. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

## Nutrition and Foods (NUTR)

**NUTR 100 F Careers in Nutrition and Foods 2 Units**

36 hours lecture per term. This course will explore careers in nutrition and foods such as dietetics, culinary arts, hospitality, and food science. Trends, future employment projections, and employment opportunities will also be emphasized. (CSU) (Degree Credit)

**NUTR 210 F Human Nutrition 3 Units**

54 hours lecture per term. This course is an introduction to the science of nutrition. Major principles, functions and sources of nutrients are discussed, as well as their relationship to health and disease. Chemistry and physiology are also discussed as they relate to nutrition. General application as it pertains to today's students is stressed. Students will analyze their food intake. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: NUTR 110)

**NUTR 210HF Honors Human Nutrition 3 Units**

54 hours lecture per term. This Honors-enhanced course is an introduction to the science of nutrition. Emphasis will be placed on major principles, functions and sources of nutrients, health and disease, as well as chemistry and physiology as they relate to nutrition. Application and development of the student's ability to critically evaluate current nutrition issues is stressed. Students will analyze their food intake. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: NUTR 110)

**NUTR 220 F Sports Nutrition 3 Units**

*Advisory:* NUTR 210 F or NUTR 210HF.

54 hours lecture per term. In this course, the principles of nutrition are studied and applied to athletes and active individuals. An emphasis is placed on energy and nutrient needs, pre- and post-event food choices, hydration, body composition, disordered eating, and supplements. This course also examines the cultural, sociological, and psychological influences related to nutrition, fitness, and athletic achievement. (Degree Credit) (CSU) AA GE, CSU GE

**NUTR 295 F Nutrition and Foods Internship 2-4 Units**

*Prerequisite(s):* NUTR 210 F or NUTR 210HF with a grade of C or better.

18 hours lecture and 60-180 hours of unpaid internship or 75-225 hours of paid internship per term. This course is designed to provide work experience directly related to the students area of study in Nutrition and Foods. This course gives students the opportunity to gain work experience in a professional setting in the nutrition or foods industry. (Degree Credit) (CSU)

## Paralegal Studies (PLEG)

**PLEG 090 F Contemporary Issues in the Law 1-3 Units**

18 hours lecture and 54 hours lab per term. This course offers timely and contemporary law-related topics designed to enhance job skills, expand the students' knowledge of the legal environment, and increase employment opportunities. Unit credit may range from one to three units in any given semester. Consult the class schedule to verify specific topic area and credit offered in a particular semester. (Degree Credit)

**PLEG 101 F Introduction to Paralegal Studies 3 Units**

54 hours lecture per term. This course is a practical introduction for those seeking a career as a paralegal. Topics include an overview of the law and our court system, the fundamentals of legal research and writing, an introduction to the use of computers in a law office, professional ethics, and the role of the paralegal in the modern law office. (CSU) (Degree Credit)

**PLEG 104 F Introduction to Legal Research and Terminology 3 Units**

54 hours lecture per term. This course is an introduction to the terminology unique to the practice of law and the legal environment, and to the techniques and procedures utilized in conducting effective legal research. Topics include an overview of the legal system, legal terminology for all major areas of law, understanding the purpose and function of primary and secondary authority, basics of legal research, and techniques for updating the law. (CSU) (Degree Credit)

**PLEG 105 F Introduction to Legal Writing 3 Units**

*Prerequisite(s):* PLEG 101 F and PLEG 104 F and ENGL 100 F or ENGL 100HF with a grade of C or better

54 hours lecture per term. 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. (CSU) (Degree Credit)

**PLEG 116 F Computers in the Law Office 3 Units**

54 hours lecture and 18 hours lab per term. This course acquaints the student with the computer basics and the popular Microsoft Office Suite in use in legal offices. Students will learn Microsoft Office components including Word, Excel, Access, PowerPoint and Outlook, and the Windows operating system as they are used in the day-to-day life of paralegals. (CSU) (Degree Credit)

**PLEG 201 F Civil Litigation I 3 Units**

*Prerequisite(s):* PLEG 101 F and PLEG 104 F, with a grade of C or better  
54 hours lecture per term. 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. (CSU) (Degree Credit)

**PLEG 202 F Civil Litigation II 3 Units**

*Prerequisite(s):* PLEG 101 F and PLEG 104 F and PLEG 201 F with a grade of C or better

54 hours lecture per term. This course continues the study of civil procedures from pretrial through trial, appeals, and collection, emphasizing the drafting of discovery documents. Students gain practical experience in all stages of a civil case. (CSU) (Degree Credit)

**PLEG 203 F Tort Law (formerly Personal Injury) 3 Units**

*Prerequisite(s):* PLEG 101 F and PLEG 104 F, with a grade of C or better.

54 hours lecture per term. This course will examine those topics that are important in a personal injury practice, including pre-litigation investigation, employment of experts, evaluation of damages, settlements, arbitration, and preparing for trial. All torts including intentional torts, negligence, strict liability, and product liability are covered. (CSU) (Degree Credit)

**PLEG 204 F Family Law 3 Units**

*Prerequisite(s):* PLEG 101 F and PLEG 104 F, with a grade of C or better

54 hours lecture per term. This course provides an overview of family law practice. Students become familiar with family law forms and the preparation of various family law matters. Topics include the initial client interview, preparing pleadings, child and spousal support, custody and visitation, marital property rights and obligations, trial preparation, enforcement procedures, and post-judgment modifications. (CSU) (Degree Credit)

**PLEG 205 F Probate, Wills and Trusts 3 Units**

*Prerequisite(s):* PLEG 101 F and PLEG 104 F with a grade of C or better

54 hours lecture per term. This course provides an overview of estate planning and probate practice. Through drafting simple wills and trusts and by lecture, students will become familiar with the specialized documents and procedures of probate practice. (CSU) (Degree Credit)

**PLEG 206 F Bankruptcy Law and Procedure 3 Units**

*Prerequisite(s):* PLEG 101 F and PLEG 104 F with a grade of C or better.

54 hours lecture per term. This course provides an overview of bankruptcy law and practice. Students will become familiar with bankruptcy forms and the federal bankruptcy courts. Topics include: the role of the paralegal in bankruptcy, bankruptcy and research, Chapters 7, 11, 12, and 13 of the bankruptcy code, and examining bankruptcy cases. (CSU) (Degree Credit)

**PLEG 207 F Computer-Assisted Legal Research 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better  
54 hours lecture per term. This course provides the student with an opportunity to explore and master legal research databases available through on-line and Internet services. In particular, this course will emphasize LEXIS/Westlaw on-line service, Internet accessibility to law libraries, and the use of CD ROM technology in conducting legal research. (CSU) (Degree Credit)

**PLEG 208 F Workers' Compensation Law 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better  
54 hours lecture per term. This course provides an overview of Workers' Compensation practice. Students become familiar with Workers' Compensation forms and the preparation of various Workers' Compensation matters. Topics include a study of the Workers' Compensation system, client interview, initiating benefits to the injured worker, discovery proceedings, vocational rehabilitation, trial preparation, appellate procedure and professional ethics. (CSU) (Degree Credit)

**PLEG 209 F Criminal Law and Procedure 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better  
54 hours lecture per term. This course provides an overview of criminal law and practice. Students will become familiar with the substantive and procedural aspects of criminal proceedings in both state and federal courts. Topics include: the role of the paralegal in prosecution and defense of criminal defendants, researching and drafting criminal court documents, constitutional ramifications in criminal courts, and sentencing procedures. (CSU) (Degree Credit)

**PLEG 210 F Paralegal Internship 2-4 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F and PLEG 105 F and PLEG 201 F and PLEG 202 F, with a grade of C or better.  
18 hours lecture and 60-180 hours of unpaid employment or volunteer work per term in a legal office. Each 60 hours per term of unpaid supervised employment is required for one unit of credit. This course provides vocational learning opportunities for a student through employment in a law office. (CSU) (Degree Credit)

**PLEG 211 F Real Property Law and Procedure 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better  
54 hours lecture per term. This course provides an overview of the law of real property and practice. Students will become familiar with the substantive and procedural aspects of real property law and the transactional requirements of conveyance. Topics include: the role of the paralegal in real estate practice, the appraisal and financing of real estate; researching and drafting real estate litigation and transactional documents, including but not limited to escrow instructions; sale, purchase and exchange agreements, deeds, deeds of trust, promissory notes, leases, and other instruments. (CSU) (Degree Credit)

**PLEG 212 F Medical Records Review 2 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better.  
36 hours lecture per term. This course provides an overview of analyzing medical records. Students will be instructed on how to interpret, analyze, and organize complex information found in medical records. The legal implications of medical records for the medical profession will be analyzed as they relate to litigation. (CSU) (Degree Credit)

**PLEG 213 F Employment and Labor Law 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better  
54 hours lecture per term. This course provides students with an overview of the legal relationship between employer and employee and a basic understanding of employment and labor related law and its impact on the employer/employee relationship. The student will study both federal and state laws applicable to the employer/employee relationship. Areas covered include the basis for the employer/employee relationship, pre-employment concerns, legal aspects of the employment relationship, discrimination issues, discrimination actions, termination of the employer/employee relationship, the collective bargaining process, employee unions, union certification and de-certification and ethical issues. (CSU) (Degree Credit)

**PLEG 214 F Contract Law and Procedure 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better  
54 hours lecture per term. This course provides an overview of the law of contracts and contract law practice and procedure. Students will become familiar with the substantive and procedural aspects of the law relating to contracts and the transactional requirements for the creation, administration, modification, and termination of contracts. (CSU) (Degree Credit)

**PLEG 215 F Discovery in Electronic Age 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better  
54 hours lecture per term. This course provides students with an overview of managing document production and organization during litigation. The student will learn how to handle a client's documents, obtain documents from opposing parties and non-parties, index and organize documents as they are received, utilize computer-assisted litigation support programs and use documents at trial. (CSU) (Degree Credit)

**PLEG 216 F Computers in the Law Office II 3 Units**

54 hours lecture per term. This course acquaints the student with the computer basics and application software that is unique to the legal environment and utilized by legal personnel. Students will be exposed to an array of legal software programs that maximizes efficiency in the legal community. Types of programs reviewed include, but are not limited to, programs for document preparation, case management, docketing, retrieval, billing and calendaring system. (CSU) (Degree Credit)

**PLEG 217 F Immigration Law 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better  
54 hours lecture per term. This course is a practical examination of the immigration and nationality laws of the United States involving a history of immigration migration, the evolution of the country's policies toward aliens and the interplay of the administrative agencies involved in the administration and enforcement of those laws: Justice Department, Labor Department, State Department and Homeland Security. Subjects will include applying for residence and work visas, attaining citizenship, granting of asylum and avoiding deportation and related proceedings. (CSU) (Degree Credit)

**PLEG 218 F Entertainment and Sports Law 3 Units**

54 hours lecture per term. This course is a practical examination of the field of entertainment and sports law in the United States. Students will examine these unique industries from a legal standpoint. Emphasis will be placed on understanding the interrelationships among the various occupations inherent in the business of entertainment and sports. Students will be exposed to contracts that govern both industries and will learn how to draft, interpret and litigate those contracts. (CSU) (Degree Credit)

**PLEG 219 F Intellectual Property 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better  
54 hours lecture per term. This course is a practical examination of the law of intellectual property, namely, trademarks, copyrights, patents and trade secrets. The methods by which each is created, procedures to register or protect each, duration of rights, protection from infringement, and new and international developments for each of these fields of intellectual property is explored. (CSU) (Degree Credit)

**PLEG 220 F Elder Law 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better.  
54 hours lecture per term. This course examines issues regarding law and procedure for the aging population; financial planning covering advanced directives, wills, power of attorney, trusts; interviewing; patient's rights in healthcare decisions; entitlement programs; managed care; social security and elder abuse. (CSU) (Degree Credit)

**PLEG 221 F Ethics for Paralegals (formerly PLEG 090FF) 2 Units**

36 hours lecture per term. This course is designed to acquaint the student with the rules of professional conduct and ethical requirements for a paralegal in today's legal environment. California State Rules, the A.B.A. Model Rules and Codes, and the N.F.P.A./N.A.L.A. Codes of Ethics will be explored. Students will examine such issues as attorney supervision of paralegals, unauthorized practice of law, confidentiality, conflicts of interest, advertising and solicitation, attorneys' fees and fiduciary duties, competence, malpractice, and ethical conduct issues in litigation. (CSU) (Degree Credit)

**PLEG 223 F Advanced Legal Research and Writing 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F and PLEG 105 F with a grade of C or better  
54 hours lecture per term. This course is an advanced practical writing skills course. Topics include drafting and generating persuasive documents, specifically motions, writs, and trial/appellate briefs. (CSU) (Degree Credit)

**PLEG 225 F Law Office Management 3 Units**

54 hours lecture per term. This course is an introduction to the role of the paralegal in law office management. Topics include: the managerial challenges in the legal environment; historical development of law firm management; the four principal managerial activities and roles of the office administrator; comprehensive understanding of financial resources, human resources, and supervision unique to the legal environment. (CSU) (Degree Credit)

**PLEG 226 F Constitutional Law 3 Units**

54 hours lecture per term. This course provides an overview of the United States Constitution including a focus on the powers and limitations granted by Articles I, II, III, and the individual rights protected in the Bill of Rights. (CSU) (Degree Credit)

**PLEG 227 F International Law 3 Units**

54 hours lecture per term. This course provides an overview of the sources of public and private international laws. Topics include what constitutes international law: various treaties, the laws and regulations of the European Union, the ICJ and ICC, NAFTA, the role of the United Nations and other current events. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit)

## Philosophy and Religious Studies (PHIL)

**PHIL 100 F Introduction to Philosophy 3 Units**

54 hours lecture per term. This course studies various viewpoints, problems, and issues regarding human nature, moral and religious understanding, knowledge of self and the world, and other selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PHIL 100)

**PHIL 100HF Honors Introduction to Philosophy 3 Units**

54 hours lecture per term. This Honors-enhanced course studies various viewpoints, problems, and issues regarding human nature, moral and religious understanding, knowledge of self and the world, and other selected topics. This class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course is only offered in the Spring term. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PHIL 100)

**PHIL 101 F Introduction to Religious Studies 3 Units**

54 hours lecture per term. This course is an introductory study of religion with emphasis on the origins and functions of religion, religious experience, and religious and theological modes of expression. Course content will be drawn from Eastern and Western traditions, ancient, medieval and modern times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 105 F World Religions 3 Units**

54 hours lecture per term. This course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism, and Buddhism. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 105HF Honors World Religions 3 Units**

54 hours lecture per term. This Honors-enhanced course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism and Buddhism. This course fulfills the Multicultural Education Requirement for graduation. This course is only offered in the Fall term. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 135 F Social and Political Philosophy 3 Units**

54 hours lecture per term. The course is an introduction to social, psychological, and political philosophies, ancient and modern; inquiry into views of human nature, the nature and varieties of social institutions, the personal and social implications of the human experience, and other selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 160 F Introduction to Ethics 3 Units**

54 hours lecture per term. This course will survey basic ethical theories in modern times in order to show how they have affected analysis of various ethical problems and their solutions both for the individual and societies. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: 120)

**PHIL 170 F Logic and Critical Thinking 3 Units**

54 hours lecture per term. This course focuses on an understanding of the relationship of language to logic, which should lead to the ability to identify and evaluate various inductive and deductive arguments. The course is also concerned that students become aware of semantic confusions and of the nature and importance of definitions. The minimal competence expected of the student is the ability to distinguish fact from judgment, belief from knowledge and skills in inductive and deductive processes, including an understanding of the formal and informal fallacies. The evaluation of an extended argument may be required by the instructor and designed to satisfy the critical thinking requirement for those planning to transfer to the CSU system. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PHIL 110)

**PHIL 172 F Critical Thinking and Writing** 3 Units  
*Prerequisite(s)*: ENGL 100 F or ENGL 100HF or ENGL 101 C or ESL 110 C with a grade of C or better.

54 hours lecture per term. This course will cover all the standard topics of a traditional critical thinking course: Form vs. Content; Inductive vs. Deductive logic; validity, truth and soundness or good definitions; and the standard formal and informal fallacies as reflected in evaluative writing. Progress toward the refining of various writing skills will be evaluated in the writing and re-writing of the extended argument as well as other areas of the course. This course is specifically designed to meet the IGETC critical thinking/writing requirement. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 195 F Women's Issues in Philosophy** 3 Units  
 54 hours lecture per term. This course will look at philosophical issues with which women in philosophy are concerned, such as theoretical accounts of the relations between men and women, theories of knowledge, world views, and the question of social justice. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 200 F Introduction to Christianity** 3 Units  
 54 hours lecture per term. This course will provide an introduction to the Christian religion, giving attention to the history of its development. Its scriptures, rituals, and beliefs will be examined, as well as important persons, groups, and events which have developed among the Roman, Orthodox, and Protestant communities of Christianity. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 201 F History of Philosophy - Ancient and Medieval** 3 Units  
 54 hours lecture per term. This course is a historical introduction to the western philosophic tradition. Selected philosophers will be examined from each of the following periods: Ancient Greek and Medieval. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PHIL 130)

**PHIL 202 F History of Philosophy - Modern and Contemporary** 3 Units  
 54 hours lecture per term. This course is a historical introduction to the western philosophic tradition. Selected philosophers will be examined from each of the following periods: modern and contemporary. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PHIL 140)

**PHIL 210 F Introduction to Judaism** 3 Units  
 54 hours lecture per term. This course will provide an introduction to the religion of Judaism, with emphasis given to its historical development, scriptures, laws, rituals, customs, and theology. Attention will also be given to the modern developments of Judaism. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 220 F The Holocaust (formerly PHIL 198AF)** 3 Units  
 54 hours lecture per term. This course will provide a review of the forces which resulted in the Jewish experience known as the Holocaust, the events that transpired during this period, and subsequent Jewish life after the Holocaust. In addition, reflections by both Jews and non-Jews on the Holocaust will be examined, as well as reflections on genocide in general. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 225 F The American Religious Experience** 3 Units  
 54 hours lecture per term. This course provides an overview of religious life in America, with the emphasis upon how the American cultural experience has shaped the religions of Africa, Europe, and Asia in their American manifestations. Particular focus will be given to religious thinking, ethics, rituals, and institutional forms. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**PHIL 250 F The Religion of Islam** 3 Units  
 54 hours lecture per term. This course provides an introduction to the study of the religion of Islam, with emphasis upon its history, its main teachings, and its major practices. Topics to be studied include the rise and spread of Islam, scriptures, law, theology and philosophy, mysticism, rituals, and modern developments. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 270 F Introduction to Asian Religions** 3 Units  
 54 hours lecture per term. This course provides an overview of the variety of religious traditions and communities found throughout Asia. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 299 F Philosophy Independent Study** 1 Unit  
 54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

## Photography (PHOT)

**PHOT 101 F Introduction to Photography** 3 Units  
 36 hours lecture and 72 hours lab per term. This course covers the historical, cultural and aesthetic foundations of photography. Students will learn to master their cameras and how to print photographs. (CSU) (UC) (Degree Credit) AA GE, CSU GE

**PHOT 103 F Intermediate Photography** 3 Units  
*Advisory*: PHOT 101 F  
 36 hours lecture and 72 hours lab per term. This course is an introduction to professional photography. Use of 4" x 5" camera, and lab lighting techniques will be emphasized. Students will learn to use the camera and lab lighting to photograph products, people and architectural subjects. Students must provide their own 35mm camera with adjustable aperture, shutter speed and focus. (CSU) (Degree Credit)

**PHOT 104 F Wedding Photography** 3 Units  
*Prerequisite(s)*: PHOT 101 F or PHOT 111 F or PHOT 112 F, with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course is designed to introduce the student to the aesthetic concepts, basic skills, and techniques used by wedding photographers. Students will acquire hands-on knowledge of photographic applications used in wedding photography. Students must provide their own DSLR cameras with full manual operations and capable of using an external flash. (CSU) (Degree Credit)

**PHOT 109 F Portrait Photography** 3 Units  
*Advisory*: PHOT 101 F or PHOT 112 F or demonstrated competency in performing various photographic skills.

36 hours lecture and 72 hours lab per term. This course is designed to give the student a working knowledge of creative and experimental portrait styles and techniques. Students will practice techniques for working with people in a studio situation using "hot lights" and with natural light. Students will have an opportunity to investigate and imitate the styles of well-known portrait photographers. Students must provide their own camera with adjustable light controls and focus. (Degree Credit) (CSU)

**PHOT 111 F Introduction to Photography from Analog to Digital 3 Units**

36 hours lecture and 72 hours lab per term. This course focuses on the cultural significance, historical progression, personal artistic expression, aesthetic experience, and the technical aspects of photography from analog to the emergence of digital photography. The course will include lectures and discussions about conceptual connotation, intellectual response, self-expression, mixed media, and introduces both camera operation and digital imaging techniques. A variety of point and shoot cameras as well as DSLR cameras may be used. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**PHOT 112 F Introduction to Professional Digital Photography 3 Units**

**Prerequisite(s):** PHOT 101 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course covers the historical, cultural, and aesthetic foundations of professional photography. This course develops advanced skills required for professional applications. The student will also explore the emergence and significance of digital technology into photography. Students may use a variety of digital cameras from point to shoot as well as Digital SLR's. (Degree Credit) (CSU)

**PHOT 114 F Professional Portrait Photography I 3 Units**

**Prerequisite(s):** PHOT 111 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course will focus on portrait photography using strobe lighting, posing, digital photography, color imaging, and project workflow. Photographic subjects will include beauty, theatrical, commercial, fashion, family and portrait. Students are required to have a DSLR camera with full manual capabilities including external flash capabilities. (CSU) (Degree Credit)

**PHOT 118 F 19th Century Photography 3 Units**

54 hours lecture per term. This course explores the history and appreciation of photography in the 19th century. Students will examine the relationship between photographic history, culture and art. In addition, this course discusses the significance of historical photography with current photographic trends. (Degree Credit) (CSU)

**PHOT 119 F 20th and 21st Century Photography 3 Units**

54 hours lecture per term. This course explores the history and appreciation of photographs in the 20th and 21st century. Students will examine the relationship between photographic history, culture, and art. In addition, this course discusses the significance of historical photographic images to current trends in photography. (Degree Credit) (CSU)

**PHOT 196 F Photography Seminar (formerly known as Communications Seminars) 0.5-4 Units**

**Advisory:** PHOT 101 F or PHOT 111 F or advanced knowledge in photography including both digital and analog applications  
0-72 hours lecture and 0-216 hours lab per term. Hours will vary according to the nature of the seminar. This course is designed to expose the students to current equipment, methods, techniques and materials. This course offers the student an opportunity for specialized training in greater depth than can be offered in a general course. This course will vary from semester to semester depending on student interest, new developments in the industry and the need for specialized training. (CSU) (Degree Credit)

**PHOT 199 F Photography Independent Study 1-3 Units**

54-162 hours independent study per term. This course is designed for students who wish to increase their knowledge of photography through individual study. Projects with written reports or outside reading with written reports are required. (Degree Credit) (UC review required)

**PHOT 214 F Professional Portrait II 3 Units**

**Prerequisite(s):** PHOT 114 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course will emphasize advanced portrait techniques to advance and refine portrait photography skills in preparation for client portfolio. Students will begin to define areas of portrait photography specialization. (CSU) (Degree Credit)

**PHOT 216 F Advanced Digital Photography 3 Units**

**Prerequisite(s):** PHOT 112 F with a grade of C or better or demonstrate competency in performing various digital photography skills.

36 hours lecture and 72 hours lab per term. This course focuses on creating a final portfolio of work. Students will practice advanced digital photography techniques and explore a variety of photographic subjects relevant for their portfolio. The integration of technical skills and aesthetic expression will be emphasized. Adobe Lightroom and the use of the Wacom tablet will be utilized in this course. Students will explore a variety of subjects possible including portraiture, industrial scientific, landscape, directorial, photojournalism, and fine-art photography that is relevant to their portfolio of work. Students will need a manual digital DSLR. (CSU) (Degree Credit)

**PHOT 217 F Applied Digital Photography 3 Units**

**Prerequisite(s):** PHOT 216 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course is designed to provide students with the skills to apply advanced digital photography techniques towards a professional portfolio presentation and prepare a strategy for career development. (CSU) (Degree Credit)

**PHOT 221 F Studio Specialties 3 Units**

**Advisory:** PHOT 111 F or PHOT 112 F or PHOT 216 F with a grade of C or better or demonstrate competency in performing various digital photography functions.

36 hours lecture and 72 hours lab per term. This course focuses on studio practices and lighting techniques. Students will practice studio techniques for a variety of studio photographic subjects that include commercial table top, architectural, publicity, and location shooting. Emphasis will be on the use of strobe lighting, mixed lighting, and special effects. Camera format will be tethered digital view camera system. Students must have a DSLR camera with full manual adjustments and that is capable of using external flash. (CSU) (Degree Credit)

**PHOT 222 F Studio Specialties II 3 Units**

**Prerequisite(s):** PHOT 221 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course focuses on advanced studio practices and lighting techniques. Students will practice advanced studio techniques specifically geared to personal portfolio work. Camera format will be tethered digital view camera system. Students must have a DSLR camera with full manual adjustments and that is capable of using external flash. (Degree Credit) (CSU)

**PHOT 223 F Creative Photography 3 Units**

54 hours lecture per term. This course explores experimental and technical processes and creative camera operations. Students have the opportunity to explore image making using photography. (Degree Credit) (CSU)

**PHOT 224 F Business Practices for Photography 3 Units**

54 hours lecture per term. This course focuses on business practices for professional photographers including both commercial and fine-art photography. This course will include lectures on business operations, legal responsibilities, branding, contracts, estimates, copyright, project workflows, and business promotion. (Degree Credit) (CSU)



**PHOT 226 F Video Capture for the Still Photographer 3 Units**

**Prerequisite(s):** PHOT 101 F with a grade of C or better.  
36 hours lecture and 72 hours lab per term. This course explores video as a tool in preparing still photographic projects and provides the basic technical skills to capture video content, utilizing a DSLR camera. Develops the skill set to record video in tandem with still photography including photographic and video narrative, still and basic HD video camera techniques, lighting, and basic sound recording. (Degree Credit) (CSU)

**PHOT 227 F Social Media and Still Photography 3 Units**

54 hours lecture per term. This course focuses on the importance of photography in social media. This course will include basic photography, video, lighting, and image editing techniques for social media platforms, including live streaming to create and manage image content. (Degree Credit) (CSU)

**PHOT 290 F Internship in Photography I 2-4 Units**

18 hours lecture per term and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through internships/employment in photography and photography-related industries. Students must have internship or employment in photography or related industry. (CSU) (Degree Credit)

**PHOT 291 F Internship in Photography II 2-4 Units**

**Prerequisite(s):** PHOT 290 F with a grade of C or better  
18 hours lecture and 60-180 hours of supervised unpaid internship or 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

**PHOT 292 F Internship in Photography III 2-4 Units**

**Prerequisite(s):** PHOT 291 F with a grade of C or better  
18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

**PHOT 293 F Internship in Photography IV 2-4 Units**

**Prerequisite(s):** PHOT 292 F with a grade of C or better  
18 hours lecture and 60-180 hours supervised unpaid internship of 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

## Physical Education (PE)

**PE 101 F Pickleball 1 Unit**

54 hours lab per term. This course provides an overview of the fundamentals for Pickleball. This sport combines the elements of tennis, badminton and table tennis. Topics will include strokes, serve, shot selection and strategies for doubles and singles play. (CSU) (Degree Credit)

**PE 102 F Yoga 1 Unit**

54 hours lab per term. This course provides an overview of yoga, an integrated study of health. It involves the practice of breathing techniques, Hatha yoga postures (asanas), meditation, and relaxation. Emphasis is on practicing the principles of pranayama (breathing) and deep relaxation to reduce stress and improve concentration, circulation, and flexibility, and unify body, mind, and spirit. The Hatha yoga portion will also help to tone and strengthen muscles. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 103 F Aikido 1 Unit**

54 hours lab per term. This course will introduce Aikido as a relatively modern Japanese martial art based upon nonresistance rather than strength. It is a non-aggressive, non-competitive art based upon a philosophy that stresses harmony with nature and control of body and mind. Comparison and introduction to related forms of throwing arts is included. Self-confidence is enhanced through the study of technique. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 104 F Spinning 1 Unit**

54 hours lab per term. This course provides a unique, indoor, group stationary cycling program. This efficient, high-energy group exercise integrates music, camaraderie and visualization in a complete body-mind exercise routine. This philosophy of being mentally and physically fit is the basis of spinning. Spinning emphasizes everyone's individual needs, regardless of athletic ability, taught in a group atmosphere. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 105 F Badminton 1 Unit**

54 hours lab per term. This course provides analysis of fundamental strokes with emphasis on court strategy for singles and doubles play. Rules, court etiquette and different types of tournaments will be introduced to the class. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 108 F Bowling 1 Unit**

54 hours lab per term. This course is designed to develop sufficient knowledge and skill for successful participation in recreational, league and tournament bowling. Emphasis will be placed on the rules, scoring, etiquette, safety, mechanics, ball dynamics and strategy. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 109 F Intermediate Yoga 2 Units**

**Prerequisite(s):** PE 102 F with a grade of C or better  
18 hours and 54 hours lab per term. This course provides breathing practices, meditation techniques, guided relaxation and intermediate yoga sequences. Discussion of yoga philosophy and movement will be based on Hatha yoga traditions. (CSU) (UC) (Degree Credit)

**PE 111 F Off-Season Training - Track and Field (formerly Decathlon) 2 Units**

108 hours lab per term. This course provides instruction and participation with advanced skill fundamentals of track and field. The events covered are sprints, horizontal jumps, vertical jumps, shot put, discus, javelin, hammer, distance and middle-distance running. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 112 F Fencing 1 Unit**

54 hours lab per term. This course provides instruction in basic fencing movement positions with the weapon, simple and compound actions, defenses, drills, and activity. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 114 F High Intensity Interval Training (formerly Cardiovascular Conditioning)****1 Unit**

54 hours lab per term. This course provides a program of personalized exercised designed for the student interested in achieving physical fitness through a program of high intensity interval training. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 115 F Golf****1 Unit**

54 hours lab per term. This course has an emphasis on learning the fundamental aspects of golf. There will be instruction in all areas of basic golf, including: rules, etiquette, and swing mechanics. Use of all golf clubs including woods, fairway metals, long irons, and short irons. Emphasis on the "short game" including chipping and putting. Class will be held at an off-campus golf facility. Facility use fee of \$5 is required. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 116 F Off-Season Training - Cross Country****1-2 Units**

54-108 hours lab per term. This course provides instruction and participation in training for the intercollegiate cross country team. An emphasis is placed on cardiovascular conditioning, strength training, and flexibility in preparation for competing in long-distance running. (Degree Credit) (CSU) CSU GE

**PE 117 F Gymnastics - Tumbling (formerly Gymnastics)****1 Unit**

54 hours lab per term. This course provides the students the opportunity to explore the possibilities of human motion in gymnastic framework. This course is designed to instruct students in a progressional motor learning experience. The skill range is from simple to complex tumbling. The course integrates the beginning, intermediate and advanced level gymnastic students together in an educational environment. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 121 F Walking for Fitness****1 Unit**

54 hours lab per term. This course will emphasize walking for health and fitness for men and women who are interested in instruction and practice in fitness walking. The class is designed to decrease the risk of coronary heart disorders by increasing heart efficiency, vital lung capacity, and the knowledge of each through aerobic and anaerobic conditioning. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 125 F Aquatic Fitness-Crosstraining****0.5-2 Units**

**Advisory:** Swim 50 yards and tread water for 5 minutes.

4.5-18 hours lecture and 13.5-54 hours lab per term. This course is designed to examine biomechanics and develop cardiovascular fitness and muscle strength through aquatic crosstraining. Students will engage in a variety of strategies that include swim fitness, fitness through paddling, and wave riding. This course includes units on water safety, technique, equipment examination. Participants seeking a crosstraining program may expect to improve their overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 126 F Beach Volleyball****1 Unit**

54 hours lab per term. This course provides basic instruction and strategies in beach volleyball. Designed to develop basic skills, knowledge of rules, team strategies and desire for future participation during leisure times. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 127 F Racquetball-Indoors****1 Unit**

54 hours lab per term. This course provides the opportunity to learn and improve the essential strokes of racquetball. Emphasis is on skill development, knowledge of rules and basic strategies for singles and doubles play. \$60 Facility use fee required. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 129 F Cardio Step (formerly Cardio Step Aerobics)****1 Unit**

54 hours lab per term. This course will provide vigorous aerobic activity through coordinated stepping movements. The class will be held in a musical setting with emphasis on cardiovascular improvements, muscle development, and an increased awareness of body composition. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 134 F Beginning Swimming****1 Unit**

54 hours lab per term. This course is designed for the beginning and novice swimmer with an emphasis on developing fundamental skills of swimming. All strokes are taught along with elementary diving and basic survival skills. Endurance training and cardiovascular fitness will be discussed. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 137 F Triathlon****1 Unit**

54 hours lab per term. This course provides cardiovascular fitness training and nutritional program information to compete successfully in a triathlon. This class offers techniques in swimming, biking and running for ultimate performance. Bike rental fee if you do not own your own bicycle. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 139 F Tennis****1 Unit**

54 hours lab per term. This course offers students the opportunity to learn and improve the essential strokes of tennis. Emphasis is on skill development, knowledge of rules and basic strategies for singles and doubles play. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 141 F Tennis Workshop****0.5-2 Units**

27-108 hours lab per term. This course is designed for those students desiring intermediate to advanced instruction in tennis. The class gives students the opportunity to put tennis techniques into practice through placement in the various levels of tennis ability. Twenty hours required for each half unit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 144 F Volleyball-Beginning****0.5-1 Units**

27-54 hours lab per term. This course provides instruction in basic skills, rules and etiquette in the sport of volleyball. Students will experience improvement through supervised instruction and participation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 145 F Volleyball - Intermediate****0.5-1 Units**

27-54 hours lab per term. This course is designed to provide progressive instruction for intermediate skill development, player positioning in an offensive and defensive system, and team play. Intermediate techniques and strategies are applied. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 148 F Non-Impact Cardiofit (formerly Non-Impact Aerobics)****1 Unit**

54 hours lab per term. This course consists of group and individual exercise program without jogging, jumping or other jarring movements. Emphasis is on cardiovascular development through static and locomotive movements set to music. This course is designed for first-time individuals of any age, or those medically restricted or with weight-related conditions. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 149 F Swim for Fitness****1 Unit**

**Advisory:** Ability to swim 50 yards and tread water for one minute

54 hours lab per term. This course is designed to increase the knowledge of the cardiovascular system through the use of aerobic workouts. Swimming strokes will improve through endurance and repetitive training. Participants seeking a fitness program may expect to improve their overall fitness levels. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

- PE 150 F Latin Cardiofit (formerly Latin Aerobic Exercise) 1 Unit**  
54 hours lab per term. This course is designed for a group and individual exercise program. Emphasis in class will be on cardiovascular development through Latin rhythm movements. Activities will include Merengue, Cha-Cha, Cumbia, Reggaeton, and floor exercise in a dance setting to music. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 151 F Water Aerobics/Pool Exercise 1 Unit**  
54 hours lab per term. This course is a fitness and recreational exercise program done in the water. Various water exercise programs are included, such as aerobics to music, flexibility activities, and conditioning activities designed for special needs. (Especially recommended for 40+ individuals and those with handicaps or movement limitations.) (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 152 F Fitness Training Lab-Circuit 1 Unit**  
54 hours lab per term. This course is designed to utilize the equipment and develop a routine with an exercise regimen that will better prepare the student for overall fitness. This course provides students an opportunity to determine their overall fitness level, and improve on areas of need. Letter Grade or Pass/No Pass option. Open Entry/Open Exit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 153 F Strength Training and Conditioning 3 Units**  
162 hours lab per term. This course is designed to allow students to strength train and cardiovascular condition their body. This class enables students to work out with a prescribed individual weight program to improve their overall physical fitness. This class will involve specific resistance exercises and cardiovascular exercises to develop parts of the body used in all types of activities. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 154 F Fitness Testing with Exercise Prescription 3 Units**  
45 hours lecture and 27 hours lab per term. This course will provide students with guidelines for the design of individual exercise programs in the areas of cardiovascular endurance, muscular strength and endurance, flexibility, and weight control. Students will participate in exercise and in the performance of field tests in the areas of aerobic capacity, muscular strength, flexibility, and body composition. Nutritional support for optimizing fitness objectives is utilized during the course. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 158 F Personalized Fitness 1 Unit**  
54 hours lab per term. This course is a supervised, group-circuit exercise program using a variety of exercise equipment that focuses on individual needs which includes the various principles and techniques of exercise as they relate to the older adult. Individual assessments will include review of medical history, resting and exercising heart rate, blood pressure, and body weight. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE
- PE 159 F Strength Training-Olympic Weights 0.5-2 Units**  
18-72 hours lab per term. This course is an open-entry lab experience for those people who want to get maximum physical return for a limited time invested. This course is designed to provide instruction and supervision of students with individualized strength programs using Olympic weights and nautilus apparatus. It is for men and women of all age groups who are interested in muscle toning, muscle rehabilitation, strength increases and body building. Workout times are adjusted to the student's schedule. Letter Grade or Pass/No Pass option. Open Entry/Open Exit. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE
- PE 160 F Beginning Basketball (formerly Basketball- Recreational) 1 Unit**  
54 hours lab per term. This course provides instruction on the basic concepts, strategy and rules of the game. The course will consist of in-class drills and demonstrations. (CSU) (UC Credit limitation) (Degree Credit) CSU GE
- PE 161 F Body Conditioning and Fitness 1 Unit**  
54 hours lab per term. This course will focus on individual exercise for contouring, conditioning, posture, weight training, aerobics and overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 162 F Conditioning for Athletes-Strength 1-2 Units**  
54-108 hours lab per term. This course is designed to organize and employ individual conditioning programs for intercollegiate athletes. The program includes analysis and appraisal of strength, cardiovascular, and flexibility of each intercollegiate athlete along with program prescriptions. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE
- PE 163 F Kickboxing 1 Unit**  
54 hours lab per term. This course provides instruction in kickboxing that stress cardiovascular endurance, strength development, and improved flexibility. The aerobic workout will include influences from several martial arts. For interested students, the sparring and self-defense aspects of kickboxing will be included. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE
- PE 165 F Lifetime Fitness 1 Unit**  
54 hours lab per term. This course provides cardiovascular fitness training, strength and conditioning exercises and nutrition programs to improve in the components of health related physical fitness. Each student will develop an individual program suited to his/her goals. Lab will cover cardio and strength training exercises, nutritional links, exercise goal setting and adaptation. (CSU) (UC Credit limitation) (Degree Credit) CSU GE
- PE 167 F Cardio Kickboxing (formerly Cardio Kick Boxing Aerobics) 1 Unit**  
54 hours lab per term. This course is designed for a group and individual exercise program. Emphasis in class will be on cardiovascular development through basic kickboxing aerobic movements. Activities include stretching, strength training, and basic kickboxing exercise (no physical contact) set to music. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 168 F Cross Fit Training (formerly Boot Camp Workout) 1 Unit**  
54 hours lab per term. This course will focus on individual exercises including obstacle course, calisthenics, conditioning, weight training, aerobics, yoga, Pilates, and overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 169 F Advanced Water Polo 1 Unit**  
**Advisory:** Ability to swim 100 yards and to tread water for at least 3 minutes.  
54 hours lab per term. This course provides instruction in advanced skills, techniques, fundamentals and tactics in the sport of water polo. This course is designed to cover strategies and game-type situations for students with a basic knowledge of the game. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE
- PE 171 F Soccer I (formerly Soccer - Recreational) 1 Unit**  
54 hours lab per term. This course provides instruction on the basic skills of soccer: technique, tactics and rules of the game. The workout will be both aerobic and anaerobic. This course will include interclass competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

- PE 172 F Competitive Fast Pitch Softball** **1 Unit**  
**Advisory:** Intermediate skill level in catching, throwing, and hitting.  
 54 hours lab per term. This course is designed for experienced softball players to give instruction in advanced techniques and game strategies. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 175 F Volleyball - Club** **1 Unit**  
 54 hours lab per term. This course provides the potential intercollegiate player with advanced skill and knowledge in volleyball. Students will receive advance level training in the skills and strategies required with team competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 179 F Intercollegiate Spirit Squad** **3 Units**  
**Prerequisite(s):** Audition  
 180 hours lab per term. This course is designed for cheer and dance team members. The focus is on the skills required for a successful spirit squad individual and group. The class will emphasize the fundamentals of lifts, pom-pom and dance technique, choreography, competition, leadership skills, and crowd motivation. Performance at school athletic events and campus functions is mandatory. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 180 F Baseball** **1 Unit**  
 54 hours lab per term. This course has an emphasis on learning the fundamental aspects of baseball. There will be instruction in all areas of baseball, including: hitting, bunting, fielding, throwing, base running, and sliding as well as an emphasis on other offensive and defensive fundamentals such as strategy, positioning and practice organization. This course is designed as an introduction to students who have the desire and ability to perform on the intercollegiate level. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 181 F Intermediate/Advanced Basketball (formerly Basketball)** **1 Unit**  
 54 hours lab per term. This course is designed for students with intermediate to advanced levels of basketball skill and knowledge. Instruction in intermediate to advanced skills of basketball: technique, strategy and rules of the game. This course will consist of in-class competition and aerobic conditioning. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 182 F Body Building and Body Development - Weight Lifting** **1 Unit**  
 54 hours lab per term. This course includes those resistive exercises designed to develop and increase size and strength of muscle tissue with emphasis on safe and proper weight lifting techniques. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 183 F Conditioning for Athletes - Circuit** **1-2 Units**  
 54-108 hours lab per term. This course provides instruction and practice in weight training, weight lifting, anaerobic and aerobic fitness, and flexibility for competition in intercollegiate athletics. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 185 F Football - Defense** **3 Units**  
 162 hours lab per term. This course is designed to give students the proper knowledge and mental preparation necessary to play collegiate football, specifically at the defensive position. Emphasis is placed on acquiring specific position skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Commission on Athletes (COA). (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 186 F Football - Offense** **3 Units**  
 162 hours lab per term. This course is designed to give students the skills, proper knowledge, and mental preparation necessary to play collegiate football, specifically at the offensive position. Emphasis is placed on acquiring specific positions skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Commission on Athletes (COA). (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 187 F Physical Fitness** **1 Unit**  
 54 hours lab per term. This course provides students the opportunity to achieve physical fitness through the use of resistance exercises, body-building routines and cardiovascular endurance exercises. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 188 F Self Defense-Boxing** **1 Unit**  
 54 hours lab per term. This course is designed to teach the students the fundamentals of boxing and self-defense. Instruction will be based on the rules and regulations of boxing. The students will learn the necessary skills and techniques for participation in amateur boxing. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 189 F Soccer II (formerly Soccer)** **1 Unit**  
 54 hours lab per term. This course provides advanced instruction on the following skills of soccer: technique, tactics and rules of the game. The workout will be both aerobic and anaerobic. The course will include interclass competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 191 F Volleyball-Advanced** **0.5-2 Units**  
 27-108 hours lab per term. This course is designed for the advanced volleyball athlete with advanced skill and knowledge in the sport of volleyball. Students will receive training in fundamentals and strategies necessary for successful competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 192 F Water Polo** **1 Unit**  
**Prerequisite(s):** Intermediate Swimmer  
**Advisory:** Ability to swim 50 yards and tread water for three minutes.  
 54 hours lab per term. This course is designed to provide aquatic game activity for the intermediate and advanced swimmer and to develop a greater understanding of the game of water polo. Instruction will be given in the fundamentals of water polo to include physical skill development, conditioning, game strategy and terminology. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 193 F Weight Training and Weight Lifting** **1 Unit**  
 54 hours lab per term. This course provides instruction in strength training and focuses on weight lifting techniques that will produce muscle endurance and muscle strength. This course will provide instruction and demonstration for Olympic style lifts. Students will develop an individual program. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 196 F Swimming - Recreational** **1 Unit**  
 54 hours lab per term. This course will provide intermediate instruction and practice in the fundamentals of swimming, including beginning diving and water-safety instruction. This course is designed to develop proficiency in basic strokes to meet prerequisite for advanced Lifesaving and Water-Safety Instruction (WSI) courses. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

- PE 199 F Physical Education Independent Study I** 1-2 Units  
54-108 hours lab per term. In this course, students should choose an interest area and schedule conferences. This class is for students who wish to participate in acceptable non-curricular physical activities or who wish to work in the field as a teaching assistant or official or to study special programs in physical education. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 202 F Intercollegiate Baseball** 3 Units  
175 hours lab per term. Enrollment subject to audition. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference and the CCCAA. The student athlete will need to pass the sports physical administered by a team physician prior to competition. All practices are included in the scheduled hours of this class. This course is designed for advanced male baseball players wanting to participate on the intercollegiate baseball team. This course is designed to prepare athletes for future participation at the four-year university level. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 203 F Intercollegiate Basketball - Men** 1 Unit  
**Advisory:** A grade of C or better or a minimum of two years of varsity high school basketball.  
85.5 hours lab per term. This course is designed for advanced male basketball players wanting to participate on the intercollegiate basketball team. Daily practice or play for a minimum 175 lab hours per semester is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the COA and Orange Empire Conference. Student athletes will need to pass the sports physical administered by a team physician prior to competition. The following intercollegiate sports offer credit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 204 F Intercollegiate Basketball - Women** 1 Unit  
**Prerequisite(s):** A grade of C or better in a minimum of two years of varsity high school basketball.  
85.5 hours lab per term. This course is designed for advanced female basketball players wanting to participate on the intercollegiate basketball team. Daily practice or play for a minimum of ten hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the COA and Orange Empire Conference. Student Athlete will need to pass the sports physical administered by a team physician prior to competition. The following intercollegiate sports offer credit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 205 F Intercollegiate Cross Country - Men and Women** 3 Units  
**Advisory:** Audition to determine fitness level and running ability (student athletes will need to pass the sports physical administered by a team physician prior to competition) 175 hours lab per term.  
This course provides instructions and training in the exercise techniques and principles required for successful development in cross country distance running and intercollegiate competition. To become eligible for athletic competition, students must meet the eligibility requirements of the CCCAA and the Orange Empire Conference. Daily practice or play for a minimum of ten hours per week. Practice and cross country meets are mandatory. NOTE: PE majors: see counselor for transfer requirements. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 207 F Intercollegiate Football** 3 Units  
**Advisory:** Audition recommended  
180 hours lab per term. This course needs to be taken in order for a student athlete to participate in intercollegiate football. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Southern California Football Association and the California Commission on Athletics. This will include daily after-school practice designed to meet the needs of those interested in football. Student must pass a physical. Course may be taken four times for credit. Materials fee of \$200 is payable at registration. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 208 F Intercollegiate Golf - Women** 2 Units  
175 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the California Community College Athletic Association (CCCAA) and Orange Empire Conference (OEC), including pass a physical exam given by the team doctor. Daily practice or play is required. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 209 F Intercollegiate Soccer** 3 Units  
175 hours lab per term. This course provides student athletes the opportunity to participate in intercollegiate soccer. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA and the Orange Empire Conference. Daily practice or play for a minimum of ten hours per week. The following intercollegiate sport offers credit. Physical Education majors must see counselor for transfer requirements. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 210 F Intercollegiate Softball - Women** 3 Units  
**Advisory:** Subject to audition  
180 hours lab per term. This course is designed for advanced female softball players to participate on the intercollegiate softball team. Participation in intercollegiate contests outside of class time is required. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA (California Community College Athletic Association) and the Orange Empire Conference (OEC). Student athletes will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 211 F Intercollegiate Swimming (formerly Swimming - Men)** 3 Units  
**Advisory:** Audition.  
175 hours lab per term. This course provides daily practice for a minimum of ten hours per week. Team standards and expectations established. This course includes competition versus local college teams. For student eligibility, students must meet the eligibility requirements of the CCCAA and the Orange Empire Conference. Student athletes are required to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 214 F Intercollegiate Tennis** 3 Units  
**Advisory:** Audition and pass sports physical administered by a team physician prior to competition  
175 hours lab per term. This course is designed for the advanced tennis player wanting to participate on the intercollegiate tennis teams. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team Physician prior to competition. Daily after-school practice or play for a minimum of ten hours per week. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 215 F Intercollegiate Track and Field - Men and Women (formerly Track - Men/Women) 3 Units**

**Advisory:** Audition (students must pass a sports physical administered by a team physician prior to competition.

180 hours lab per term. This course provides instruction, training and practice in the advanced techniques of track and field. To be eligible, students must meet the eligibility requirements of the CCCAA and the Orange Empire Conference. Practice and track and field meets are mandatory. NOTE: Physical Education majors: see counselor for transfer requirements. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 217 F Intercollegiate Sand Volleyball-Women 2 Units**

**Advisory:** Student needs to be able to perform competitive collegiate-level volleyball skills as assessed by the instructor

180 hours lab per term. This course is designed for advanced sand volleyball players with a strong desire to participate on the intercollegiate sand volleyball team. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 218 F Intercollegiate Volleyball - Women 2 Units**

**Advisory:** The student needs to be able to perform collegiate level volleyball skills as assessed by the instructor

175 hours lab per term. This course is designed for advanced female volleyball players to participate on the intercollegiate volleyball team. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA (California Community College Athletic Association) and the Orange Empire Conference (OEC). Student athletes will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

**PE 219 F Intercollegiate Water Polo 3 Units**

**Advisory:** Ability to swim 50 yards and tread water for 3 minutes

180 hours lab per term. This course is designed for the competitive student athlete participating in water polo. Course content will include aspects of competitive training such as weight training, repetitive swim sets, offensive and defensive game strategy, and intercollegiate contests. All participants will need to meet eligibility requirements set by the California Community College Athletic Association (CCCAA). Student athlete will need to pass the sports physical administered by a team physician prior to competition. They will also be governed by their given conference rules and regulations. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 220 F Intercollegiate Lacrosse - Women 3 Units**

**Advisory:** Tryout.

175 hours lab per term. This course provides opportunities for competitive level lacrosse athletes. Students must meet the eligibility requirements set forth by the CCCAA. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) CSU GE

**PE 221 F Intercollegiate Volleyball - Men 2 Units**

**Advisory:** Perform collegiate level volleyball skills as assessed by the instructor

175 hours lab per term. This course provides advanced male volleyball players the opportunity to participate on the intercollegiate volleyball team. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA (California Community College Athletic Association) and the Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit (CSU) (UC) (Degree Credit) CSU GE

**PE 222 F Badminton - Women 2 Units**

**Advisory:** Audition 180 hours lab per term.

For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference and the CCCAA. Also, candidates must pass a physical exam. A tryout is required to demonstrate skills and badminton ability. Daily practices and games per schedule. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

**PE 223 F Pilates Mat I 1 Unit**

54 hours lab per term. This course provides instruction in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The course will include mat work, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 224 F Pilates Mat II 1 Unit**

**Prerequisite(s):** PE 223 F with a grade of C or better

54 hours lab per term. This course provides instruction in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. This course will include advanced level mat work using mats, rings, and foam rollers, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 225 F Pilates Reformer 2 Units**

**Prerequisite(s):** PE 223 F with a grade of C or better.

Corequisite: PE 226 F with a grade of C or better. 108 hours lab per term. This course covers alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The course will include exercises in mat work and on the reformer, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (Degree Credit) (CSU) CSU GE

**PE 226 F Pilates Apparatus 2 Units**

**Prerequisite(s):** PE 223 F with a grade of C or better.

Corequisite: PE 225 F with a grade of C or better. 108 hours lab per term. This course emphasizes beginning through advanced levels of instruction of exercises and concepts developed by Joseph H. Pilates and incorporating various equipment. This course focuses on exercises for Pilates apparatus, including the Trapeze Table/Cadillac/Tower, Pilates Chair, Step Barrel and Ladder Barrel. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC) CSU GE

**PE 227 F Effective Teaching Methods for Pilates 2 Units**

**Prerequisite(s):** PE 223 F with a grade of C or better

Corequisite: PE 225 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course covers the principles, sequencing, progressions, cues, modifications, muscular integration and appropriate terminology that students need to effectively teach Pilates exercises. (CSU) (Degree Credit)

**PE 228 F Pilates Observation and Evaluation (formerly Pilates Internship) 2 Units**

**Prerequisite(s):** PE 227 F with a grade of C or better

Corequisite: PE 229 F with a grade of C or better. 18 hours lecture and 54-162 hours lab per term. This course gives students the opportunity to assist and teach Pilates on all pieces of equipment, including Mat, Reformer, Cadillac, Chair, Barrel, and Spine Corrector. (CSU) (UC review required) (Degree Credit) CSU GE

- PE 229 F Pilates Clinic** **2 Units**  
**Prerequisite(s):** PE 227 F with a grade of C or better.  
**Advisory:** WELL 265 F.  
 Corequisite: PE 228 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course offers students the practical experience of instructing Pilates. This lab experience develops student confidence and professional Pilates training while working with the public under supervision of instructor. (CSU) (Degree Credit) CSU GE
- PE 230 F Yoga Teaching Training Fundamentals** **2 Units**  
**Prerequisite(s):** PE 102 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course will teach students the fundamentals of yoga that are essential for both practice and teaching. Students will learn proper body mechanics, alignment principles, and breathing techniques as they relate to the performance and instruction of beginning yoga poses. Topics include the history and philosophy of yoga, Sanskrit terminology, injury prevention, and vocational opportunities. Field trip may be required outside of regular class times. (CSU) (Degree Credit)
- PE 231 F Yoga Teaching Training Development** **2 Units**  
**Prerequisite(s):** PE 102 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course provides students with the tools to design and teach a 60-minute yoga class with verbal clarity. This course integrates yogic history and philosophy with Yoga Sutras, body mechanics and alignment, and complementary practices such as breathing styles, flow sequences, and subtle body. Topics include principles of teaching yoga as well as lifestyle choices and ethics for yoga teachers. Field trips may be required outside of regularly-scheduled class times. (CSU) (Degree Credit)
- PE 234 F Yoga Teaching Training Integration** **2 Units**  
**Prerequisite(s):** PE 102 F with a grade of C or better.  
 18 hours lecture and 54 hours lab per term. This course provides aspiring yoga teachers with tools to deepen their independent practice in order to strengthen their teaching and develop a personal teaching style. This course continues to focus on designing, integrating, and implementing knowledge and teaching of asanas, pranayama techniques, meditation, and yogic history and philosophy. Students also learn about the business aspects of teaching yoga. Field trips may be required outside of regularly-scheduled class times. (CSU) (Degree Credit)
- PE 235 F First Aid, CPR, and Safety Education** **3 Units**  
 54 hours lecture per term. This course clarifies when and how to call for emergency medical help, eliminating the confusion that is frequently a factor in any emergency. This course emphasizes the importance of a safe, healthy lifestyle. The American Red Cross instructional outline will be followed. Students will be certified in both Standard First Aid and CPR. (CSU) (UC) (C-ID: KIN 101)
- PE 236 F Prevention and Care of Athletic Injuries** **3 Units**  
 54 hours lecture per term. This course provides basic exposure to the care and prevention of sports-related injuries and illnesses. Discussion includes mechanism of injury, signs and symptoms and the appropriate treatment for the most common injuries. Some class time is spent in the Fullerton College training room learning how to tape ankles and better understand the necessary equipment. (CSU) (UC) (Degree Credit)
- PE 239 F Open Water Scuba Diving** **3 Units**  
**Advisory:** Ability to swim 50 yards and tread water for 3 minutes  
 36 hours lecture and 72 hours lab per term. This is a course designed to prepare the student to perform skills of skin and SCUBA diving. Instruction will identify, discuss, and employ safety techniques in all phases of underwater diving. Confined water training will be practiced in the pool and repeated during open-water (ocean) dive trips. Field trips and boat dives are required for certification, but certification is not required for completion of this course. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 240 F Sports Officiating (formerly Sports Officiating for Men)** **3 Units**  
 54 hours lecture per term. This course covers the basic rules and mechanics of officiating the sports of football, baseball, basketball, softball and soccer. Students will receive practical experience in sports officiating. Students will receive guidance in pursuit of a career in officiating. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 243 F Stress Management** **3 Units**  
 54 hours lecture per term. This course examines productive and non-productive stress and the influence of various types of stress on health and wellness. Topics include the physiological aspects of stress and its effects on health, assessments of personal coping style, strategies for coping effectively with stress, relaxation techniques, mindful awareness, and positive self-talk. Emphasis is placed on practical application of stress management techniques in daily life. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 244 F Techniques and Principles of Coaching** **3 Units**  
 54 hours lecture per term. This course will focus on the factors related to coaching strategies, techniques, principles, and philosophies. Units on nutrition and substance use. ASEP Coaching Certification offered through this course. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 245 F Lifesaving, Basic Rescue and CPR** **2 Units**  
**Advisory:** Ability to swim.  
 27 hours lecture and 27 hours lab per term. This course follows the guidelines set by the American Red Cross to teach students to critically analyze the strategies and learn the skills necessary to successfully execute the various first aid and lifesaving rescues for on-land and in-water emergencies. Students will have the opportunity to qualify for lifeguard training, first aid, CPR and AED certifications following the standards set forth by the American Red Cross. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 246 F Advanced/Master SCUBA Diver** **3 Units**  
**Advisory:** Demonstrate the basic skills of SCUBA according to the national standards of NAUI: Regulator clear, mask clear, low and out of air emergency. Students must be able to swim in order to complete the water component of the course.  
 Students must be able to swim in order to complete the water component of the course. 36 hours lecture and 72 hours lab per term. This course is an intensive program consisting of lectures and practical application of water skills. The information presented will increase the student's knowledge in the area of equipment, ocean environment, safety, decompression, leadership and specialty diving options. This course provides the opportunity to receive certification not only for Advanced and/or Master, but also for specialties such as Rescue, Deep Water, Night, and Decompression diving, etc. NAUI standards and certification will be utilized. Field trips may be required outside of regularly-scheduled class time. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 247 F Sports Management****3 Units**

54 hours lecture per term. This course introduces organization, management, planning, staffing, directing, and controlling a sports program. The course also includes such areas as budget, facilities, scheduling, officials, transportation, public relations, parent and booster clubs, purchase and care of athletic equipment, fundraising, and marketing. (CSU) (Degree Credit) AA GE, CSU GE

**PE 248 F Psychology of Sport****3 Units**

54 hours lecture per term. This course will assist students to understand the effects of psychological factors on motor performance. In addition, students will gain an understanding of the effects of participating in physical activity on psychological development, health, and well-being. (CSU) (Degree Credit) CSU GE

**PE 250 F Sports and Society****3 Units**

54 hours lecture per term. This course examines the role of sport in modern society; looks at how sport influences and shapes global attitudes among nations; and investigates the historical, social, economic and political impact of sport on society. This course fulfills Multicultural Education Requirement for graduation. (CSU) (Degree Credit) CSU GE

**PE 252 F Introduction to Kinesiology****3 Units**

54 hours lecture per term. This course is an introduction to kinesiology as a profession and as an academic discipline. This course explores sub-disciplines, opportunities in the field, philosophy, scientific foundation, and analyzes and evaluates individuals that have influenced these trends and issues in the 21st century. (Degree Credit) (CSU) (C-ID: KIN 100)

**PE 254 F Personal Fitness Trainer****3 Units**

54 hours lecture per term. 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 and Conditioning Association (NSCA) and the National Academy of Sports Medicine (NASM). Topic areas include exercise sciences, nutrition, exercise techniques in resistance, cardiovascular, and flexibility training, consultation and evaluation of new clients, program design for physical training, clients with unique needs, and safety and legal issues with personal training. (CSU) (Degree Credit) CSU GE

**PE 266 F Fitness for Living (formerly Physical Fitness as a Lifelong Concept)****3 Units**

54 hours lecture per term. This course provides the student an opportunity to survey and analyze the exercise components that make up our individual physical beings. Students will appraise the concepts of behavior that may result in an optimally fit and healthy life-style. Additionally, students will observe the effects that age has on specific body systems and how a reasonably conceived and defined program of activity and diet may result in improved fitness, wellness and quality of life with advancing years. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 270 F Exercise Nutrition****3 Units**

54 hours lecture per term. This course provides scientific information for sport nutrition that covers the principles, background and rationale for current nutrition guidelines for athletes. The goal is to learn to combine good nutritional habits along with a quality exercise regime to meet weight control goals. This course will emphasize caloric planning, energy expenditure, metabolism, and eating disorders. Diet theories will be explained along with the evaluation of fad diets and supplements. (CSU) (Degree Credit)

**PE 280 F Theory of Coaching Baseball (formerly Professional Activities: Theory of Baseball)****3 Units**

**Advisory:** Student must display skill ability comparable to college level baseball

54 hours lecture and 18 hours lab per term. This course is designed to prepare future physical education teachers or community youth coaches in the theory of coaching baseball. This course will include the mental and physical preparation of becoming a complete baseball player, theory and practical experience of offensive and defensive phases of the game of baseball, the individual technique drills for each of the nine positions; coach and umpire relationships; the planning and execution of practice sessions; and the strategies involved during a game. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 281 F Professional Activities: Theory of Basketball****2 Units**

18 hours lecture and 36 hours lab per term. The course deals with basketball from beginning to present day. The psychology of coaching basketball, player fundamentals, administration of a total basketball program, behavioral objectives for basketball, practical experience of teaching offense and defense will be covered. (CSU) (UC Credit Limitation) (Degree Credit)

**PE 282 F Theory of Coaching Softball****2 Units**

18 hours lecture and 54 hours lab per term. This course is designed to give students the skills, proper knowledge, and mental preparation necessary to play or coach collegiate softball. Emphasis is placed on acquiring specific positions skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Community College Athletic Association (CCCAA). (CSU) (UC Credit Limitation) (Degree Credit)

**PE 283 F Theory of Coaching Football (formerly Professional Activities/ Theory of Football)****3 Units**

54 hours lecture per term. This course is designed for student going into physical education, coaching or recreation with basic fundamentals, strategy and history of football. Students will gain an awareness of techniques and concepts relating to better performance and learning experiences. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 284 F Theory of Coaching Soccer****2 Units**

36 hours lecture per term. This course provides preparation for future physical education and recreation teachers or community coaches in the theory of coaching soccer. It includes the mental and physical preparation of becoming an instructor of, or participant in, the sport of soccer and the theory and practical experience of offensive and defensive phases of the game. Technique, tactics, fitness, and psychology will be covered in detail. Rules and regulations of the game, along with equipment and safety, will be discussed. (CSU) (UC Credit Limitation) (Degree Credit)

**PE 285 F Theory of Coaching Volleyball (formerly Professional Activities - Theory of Volleyball)****3 Units**

54 hours lecture per term. This course provides the history of volleyball to present day, the theory of coaching strategy, player fundamentals, and program implementation and administration. Behavioral objectives for volleyball, practical experience of teaching offense and defensive systems will be covered. Field trips may be required outside of regularly-scheduled class. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE



**PE 296 F Off Season Athletes - Softball** 0.5-3 Units

27-162 hours lab per term. This course is designed to give students the specific preparation necessary to play college softball. It will include position specific training and advanced strategies within a team environment. The students will be instructed on charting using technology to determine individual and team tendencies. Try-outs will be conducted for the purposes of assigning positions. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## Physics (PHYS)

**PHYS 120 F Relativity for Poets** 3 Units

**Prerequisite(s):** MATH 040 F or MATH 041 F or MATH 043 F, with a grade of "C" or better or math skills clearance.

54 hours lecture per term. This course is intended for non-science students seeking general education credit in a physical science course without a lab. It presents Einstein's bizarre universe, from black holes to the Big Bang. Relativity's role in everyday life is discussed, including GPS and the magnet stuck to your fridge. Emphasis is placed on concepts rather than manipulating equations. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**PHYS 130 F Elementary Physics** 4 Units

**Prerequisite(s):** MATH 020 F with a grade of C or better or math skills clearance

54 hours lecture and 54 hours lab per term. This course is a survey of some of the more important principles, philosophy, and phenomena of physics. Topics include mechanics, electricity and magnetism, wave phenomena, and modern physics. The course is intended for those with no previous experience in physics. It is not open to anyone who has taken a college-level physics course. The laboratory includes experiments in measurement, mechanics, electricity, wave phenomena, and radioactivity. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after PHYS 205 F, PHYS 210 F or PHYS 221 F.) AA GE, CSU GE, IGETC (C-ID: PHYS 140)

**PHYS 205 F Physics for the Life Sciences I** 4 Units

**Prerequisite(s):** MATH 141 F or MATH 141HF and MATH 142 F, with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers Newtonian mechanics, conservation laws, heat, and waves. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the first half of an algebra-based two-semester sequence (PHYS 205 F and 206 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the CSU system, but not the UC system. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 105)

**PHYS 206 F Physics for the Life Sciences II** 4 Units

**Prerequisite(s):** PHYS 205 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers electricity and magnetism, optics, special relativity, and quantum physics. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the second half of an algebra-based two-semester sequence (PHYS 205 F and 206 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the CSU system, but not the UC system. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 110)

**PHYS 210 F Physics with Calculus for the Life Sciences I** 4 Units

**Corequisite(s):** MATH 151 F or MATH 151HF with a grade of C or better.

54 hours lecture and 54 hours lab per term. This course covers Newtonian mechanics, conservation laws, heat, and waves. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the first half of a calculus-based two-semester sequence (PHYS 210 F and 211 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the UC system; the CSU system will accept either this sequence or PHYS 205 F and PHYS 206 F. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 105)

**PHYS 211 F Physics with Calculus for the Life Sciences II** 4 Units

**Prerequisite(s):** PHYS 210 F with a grade of C or better

Corequisite: MATH 152 F or MATH 152HF with a grade of C or better. 54 hours lecture and 54 hours lab per term. This course covers electricity and magnetism, optics, special relativity, and quantum physics. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the second half of a calculus-based two-semester sequence (PHYS 210 F and 211 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the UC system; the CSU system will accept either this sequence or PHYS 205 F and 206 F. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 110)

**PHYS 221 F General Physics I** 4 Units

**Prerequisite(s):** MATH 151 F or MATH 151HF with a grade of C or better or a grade of Pass in math skills clearance

Corequisite: MATH 152 F or MATH 152HF, with a grade of C or better. 54 hours lecture and 54 hours lab per term. This course covers mechanics, vibrations, properties of matter. The laboratory provides students with hands-on experience working with the subject material. Required for majors in physics and engineering. Recommended for majors in all the other physical sciences. PHYS 221 F, 222 F, and 223 F are a calculus-based, three-semester survey of introductory physics. High school physics or PHYS 130 F is strongly recommended, and students must complete one semester of calculus before beginning the sequence. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 205)

**PHYS 222 F General Physics II** 4 Units

**Prerequisite(s):** PHYS 221 F and MATH 152 F or MATH 152HF with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers electrostatics, electric and magnetic fields, simple DC and AC circuits, and Maxwell's equations in integral form. The laboratory provides students with hands-on experience working with the subject material. Required for majors in physics and engineering. Recommended for majors in all the other physical sciences. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 210)

**PHYS 223 F General Physics III** 4 Units

**Prerequisite(s):** PHYS 222 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers the topics of thermodynamics, mechanical and electromagnetic waves, geometrical and physical optics, special relativity, and an introduction to quantum mechanics including wave-particle duality, the uncertainty principle, the atom, and the nucleus. The laboratory provides students with hands-on experience working with the subject material. PHYS 221 F, 222 F, and 223 F are a calculus-based three-semester survey of introductory physics. Required of majors in physics and most majors in engineering. Recommended for majors in all the other physical sciences. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 215)

## Political Science (POSC)

### POSC 100 F American Government

**3 Units**

54 hours lecture per term. This course is an introduction to American government that involves learning about its institutions, i.e., the Congress, the Presidency, the Judiciary, the interaction among the federal, state, and local governments. The role of political parties, elections, public bureaucracies, interest groups and other complimentary elements that interact/affect the political system. Students will develop the necessary skills for analyzing and critically appraising such areas as competing theories, the historical evolution of the Republic and its Constitution. (Degree Credit) (CSU) (UC) AA, GE, CSU GE, IGETC (C-ID: POLS 110)

### POSC 100HF Honors American Government

**3 Units**

54 hours lecture per term. This Honors-enhanced course is an introduction to American government that involves learning about its institutions, i.e., the Congress, the Presidency, the Judiciary, the interaction among the federal, state, and local governments, the role of political parties, elections, public bureaucracies, interest groups and other complimentary elements that interact/affect the political system. Students will develop the necessary skills for analyzing and critically appraising such areas as competing theories, the historical evolution of the Republic and its Constitution. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 110)

### POSC 110 F Contemporary American Politics

**3 Units**

54 hours lecture per term. This course emphasizes the political problems that are current in the American political scene and provides an opportunity for the student to investigate and evaluate contending response to those problems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### POSC 110HF Honors Contemporary American Politics

**3 Units**

54 hours lecture per term. This Honors-enhanced course emphasizes the political problems that are current in the American political scene and provides an opportunity for the student to investigate and evaluate contending response to those problems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### POSC 120 F Introduction to Political Theory

**3 Units**

54 hours lecture per term. The course is a survey of Western political theory. It is intended to introduce students to political theory from Greek times to the Enlightenment and beyond. It is intended to show students how political theory shapes current institutions and ideologies in the United States, Europe, and other countries around the world. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 120)

### POSC 150 F California Government and Politics

**3 Units**

54 hours lecture per term. This course is an introduction to the study of state and local politics, exploring the political culture, processes, behavior, institutions, public policy, and distribution of power in California. Policies in other states are examined to aid understanding of California politics. Topics include the political culture of the state, the process of change, policy agendas, budgeting, and the current status of states within the federal system. (Degree Credit) (CSU) AA GE, CSU GE

### POSC 180 F Capital Field Trip: Sacramento Seminar

**3 Units**

54 hours lecture per term. This seminar course joins with student delegations from other California colleges and universities that meet in the state capitol for a policy conference each spring. Includes presentations and panel discussions by legislators, lobbyists, public administrators, and journalists. This course will meet regularly before the practicum to prepare students for the conference and an independent research paper will be assigned. This course includes a mandatory three-day field trip to Sacramento's Legislative Seminar. (Degree Credit) (CSU)

### POSC 180HF Honors Capital Field Trip - Sacramento Seminar

**3 Units**

54 hours lecture per term. This Honors-enhanced course enables students to join with student delegations from other California colleges and universities that meet in the state capitol for a policy conference each Spring. Includes presentations and panel discussions by legislators, lobbyists, public administrators, and journalists. This class will meet regularly before the practicum to prepare students for the conference and an independent research paper will be assigned. This course includes a mandatory three-day field trip to Sacramento's Legislative Seminar. (Degree Credit) (CSU)

### POSC 198 F Political Campaign Internship

**1 Unit**

60 hours unpaid internship or 75 hours paid internship per term. This course allows students to increase their knowledge of political science through campaign work for a candidate for elected office. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)

### POSC 199 F Public Policy Internship

**1 Unit**

60 hours unpaid internship or 75 hours paid internship per term. This course allows students to increase their knowledge of public policy through an internship with an elected official, government office, or non-profit agency. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)

### POSC 200 F Introduction to the Study of Politics

**3 Units**

54 hours lecture per term. This course is an introduction to the study of politics in general, not simply American politics. Explores the many faces of politics all over the world, examining its relationship to morality, culture, economics, justice and international affairs both theoretically and practically. As an introductory course, it includes elements from the major sub-disciplines of political science, i.e., American politics, comparative politics, and international relations. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 150)

### POSC 215 F Comparative Politics

**3 Units**

54 hours lecture per term. This course emphasizes various methodologies necessary to compare political systems representing Eurasia, the Western Hemisphere, and the developing nations. It explores the differences and similarities in the operation of the major branches of government, political party and electoral systems, types and activities of interest groups, individual rights and liberties, leadership patterns, the power relations among local, provincial, national and supra-national regional governments such as the European Community, and the challenges facing transitional democracies throughout the world. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 130)

### POSC 216 F Government and Politics of the Middle East

**3 Units**

54 hours lecture per term. This course is an introduction to the historical, social, economic and ideological foundations of the Middle East in general and major states in the region in particular. Emphasis is placed on the political and economic developments in Egypt, Iraq, Iran, Israel and Saudi Arabia. Topics covered include: introduction to the land, peoples, cultures and religions; colonialism and the emergence of modern states following World War I; Western influence and Islamic revivalism; regional conflicts (Arab-Israeli, Iran-Iraq, Gulf War); the politics and economics of oil; U.S. based ethnic interest groups and their influence on U.S. foreign policy; patrimonialism and militarism; liberalization and democratization. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**POSC 220 F Introduction to Public Administration 3 Units**

54 hours lecture per term. This course covers the role of government in American society, the historic development of the public service, management issues related to modern governmental enterprises, problems of personnel, public budgeting and alternative strategies for securing administrative responsibility. This course focuses on readings and cases pertaining to local and state administration, although issues involving the federal level are discussed where appropriate. This course examines, from a multidisciplinary perspective, those essential competencies, values and issues important to public service organizations and the importance of public policy at the local, state, national and international levels. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) CSU GE, AA GE

**POSC 230 F Introduction to International Relations 3 Units**

54 hours lecture per term. This course is a study in the evolution of the international system, focusing on theories of international relations and globalization, and the role of the state, transnational corporations, and non-governmental/inter-governmental organizations. Special emphasis is given to the rise of globalization, economic and cultural interdependence, the role of international law, North-South relations, and the challenge of dealing with environmental/ecological destruction in a world dominated by states in the post Cold War era. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 140)

**POSC 250 F Gender and Politics 3 Units**

54 hours lecture per term. This course is an introduction to the study of global politics at the national, state, and local levels with an emphasis on the role of gender, including an examination of politics and the intersection of gender, race, class, and ethnicity. Contemporary political analysis will focus on issues such as equal pay, sex discrimination in education and the workplace, affirmative action, reproductive rights, sexual choice, domestic violence, and increasing the representation of members of underrepresented groups in political arenas. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**POSC 275 F Introduction to Public Law 3 Units**

54 hours lecture per term. This course explores the interactive dynamic among the judicial, legislative, and executive branches in the creation and implementation of public law. It involves an extensive analysis of cases relating to the separation of powers, federal-state relations, and rights of property, free expression, privacy, criminal due process, political participation, and equality under the law. Corollary topics include orientation to legal research, case briefing, development of judicial review, judicial organization and decision-making, sources and limits of judicial power, and the political impact of Supreme Court decisions. Students will participate in various simulations of court decisions. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**POSC 299 F Political Science Independent Study 1 Unit**

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of political science through individual study and small group conferences. Students successfully completing this course will be awarded elective credit in the Social Science area. (Degree Credit) (CSU) (UC review required)

## Portuguese (PORT)

**PORT 101 F Elementary Portuguese I 5 Units**

90 hours lecture per term. The course focuses on the four major skills of language learning—listening comprehension, speaking, reading and writing—and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Brazil and other Portuguese-speaking countries. This course is conducted primarily in Brazilian Portuguese. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE.

**PORT 102 F Elementary Portuguese II 5 Units**

**Prerequisite(s):** PORT 101 F with a grade of C or better or Pass or one year of high school Portuguese with a grade of C or better  
90 hours lecture per term. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Portuguese-speaking countries. This course is conducted primarily in Brazilian Portuguese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Printing Technology (PRNT)

**PRNT 030 F Introductory Printing Skills Lab 0.5-6 Units**

**Prerequisite(s):** PRNT 101 F with a grade of C or better.  
27-324 hours lab per term. This advanced course will provide students with an opportunity to practice various printing skills that have developed from completing other printing courses. Students can improve skills in the operation of digital printing equipment, electronic pre-press, large offset press operation, small offset press operation, flexographic press operation, bindery operations, paper specifications, and machine maintenance. (Degree Credit)

**PRNT 031 F Offset Skills Lab 0.5-6 Units**

27-324 hours lab per term. This course provides students with the opportunity to practice offset lithographic printing skills through further usage of printing equipment. Use of small and large offset presses, electronic pre-press and computer-to-plate systems can be practiced. (Degree Credit)

**PRNT 032 F Flexographic Printing Skills Lab (formerly PRNT 090 F) 0.5-6 Units**

**Advisory:** Completion of or current enrollment in a flexographic or introduction to printing course.

27-324 hours lab per term. This course provides students with the opportunity to practice flexographic printing skills through further usage of Esko Automation Engine software, CTP (Computer to Plate) hardware and software, plate mounting and flexographic printing equipment. (Degree Credit)

**PRNT 033 F Digital Printing Skills Lab 0.5-6 Units**

**Prerequisite(s):** PRNT 060 F or PRNT 075 F, with a grade of C or better  
27-324 hours lab per term. This course provides students with the opportunity to practice offset digital printing skills through further usage of printing equipment. (Degree Credit)

**PRNT 034 F Prepress Skills Lab 0.5-6 Units**

**Prerequisite(s):** PRNT 075 F with a grade of C or better  
27-324 hours lab per term. This course provides students with the opportunity to practice prepress skills through further usage of prepress equipment. (Degree Credit)

**PRNT 035 F Screen Printing Skills Lab 0.5-6 Units**

**Advisory:** Ability to safely operate silk screen printing equipment.  
27-324 hours lab per term. This advanced course will provide students with an opportunity to practice silk screen printing skills that have developed from completing other printing courses. (Degree Credit)

**PRNT 044 F Self-Publishing Techniques for Sequential Art 3 Units**

This course introduces students to publishing techniques for sequential art including comics, graphic novels, and children's books. Students learn to produce their work both with the professional equipment, as well as how to successfully publish with limited printing capabilities.

**PRNT 050 F Screen Printing I (formerly PRNT 072AF) 2 Units**

18 hours lecture and 54 hours lab per term. This is a basic course which introduces the principle, basic methods and techniques of preparing designs and placing stencils on a screen printing frame. Topics include establish register systems and printing on various substrates as per industrial procedures, care, use and safety precautions in operating and cleaning of the screen printing frames, equipment and supplies. (Degree Credit)

**PRNT 051 F Screen Printing II (formerly PRNT 072BF) 2 Units**

**Prerequisite(s):** PRNT 050 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This is an intermediate course which covers vocational copy preparation techniques or multi-color reproduction, register and color matching. Instruction includes ink composition, modifiers and proper ink for production. Emphasis is on new inks and curing procedures (Degree Credit)

**PRNT 052 F Screen Printing III (formerly PRNT 072CF) 2 Units**

**Prerequisite(s):** PRNT 051 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course prepares students to print multi-color projects with tight register printing on various substrates. Topics also include heat transfer and gray scale printing. (Degree Credit)

**PRNT 060 F Basic Digital Printing (formerly PRNT 070 F) 2 Units**

18 hours lecture and 54 hours lab per term. This course introduces students to the field of digital imaging using desktop publishing software and digital presses, as well as finishing equipment. This course includes instruction in page layout and design using various computer applications including InDesign, Illustrator, and Photoshop. Computerized pre-press instruction includes preflighting of files and imposition. This course also includes instruction on the operation of digital RIP systems and bindery, preparing the student for more advanced digital imaging classes, as well as occupational skills necessary in in-plant graphics and printing today. (Degree Credit)

**PRNT 061 F Intermediate Digital Imaging (formerly PRNT 070 F) 2 Units**

**Prerequisite(s):** PRNT 06 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This is an intermediate course which covers the technical aspects of digital image layout and digital presswork and intermediate design theory. This course is designed for those entering the printing field and are interested in training for digital press operation. Course content includes the application of knowledge and performance of pressroom safety, digital marking systems, electronic prepress, graphic layout for print application, press maintenance techniques, and an exposure to intermediate production techniques. (Degree Credit)

**PRNT 062 F Advanced Digital Imaging (formerly PRNT 070 F) 2 Units**

**Prerequisite(s):** PRNT 061 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This advanced course covers the technical aspects of digital image layout, digital presswork and advanced design theory. This course is designed for those entering the printing field and are interested in training for digital press operation. Course content includes the application of knowledge and performance of pressroom safety, digital marketing systems, electronic prepress, graphic layout for print application, press maintenance techniques, and an exposure to advanced production techniques. (Degree Credit)

**PRNT 075 F Electronic Prepress I 6 Units**

**Advisory:** PRNT 101 F.  
72 hours lecture and 144 hours lab per term. This course has pre-flighting, export of files, imposition, file formats, and computer-to-plate imaging for sheet fed offset presswork. This course presents the theory of color and how it applies to the lithographic process and digital imaging. Typesetting, proof reading and image manipulation via digital files, to merge copy and graphics, is an integral part of this course. Design and creativity is not the intent of this course. Curriculum includes the Printing Industries of America Prepress Skills Training Program. Software applications including Adobe Creative Suites (Acrobat, InDesign, Bridge, Photoshop and Illustrator), Rampage RIP, Preps imposition, XMPie variable data, and Suitcase Fusion will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress). (Degree Credit)

**PRNT 077 F Advanced Electronic Prepress 6 Units**

**Advisory:** PRNT 075 F  
72 hours lecture and 144 hours lab per term. This course presents the advanced theory of color management and how it applies to the lithographic process and digital imaging. This course has instruction in electronic page layout, preflighting, exporting of files, imposition, file formats, and plate imaging for sheetfed offset press. Curriculum includes the Printing Industries of America Prepress Skills Training Program Tasks 4, 5, and 6. Software application including Adobe Creative Suites (Acrobat, InDesign, Photoshop, and Illustrator), Rampage RIP, Preps imposition, Fiery Color Profiler Suite, and XMPie variable data will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress.) (Degree Credit)

**PRNT 085 F Introduction to Flexography 4 Units**

54 hours lecture and 54 hours lab per term. This introductory course will provide the student with a technical understanding of flexographic press operation for one, two and three color printing. Students will practice the set-up, operation, and clean-up of a narrow web flexographic press. Topics for discussion will include history of flexography, flexographic plates, plate mounting, ink systems and nomenclature, types of cylinders, substrates, die cutting, stripping, slitting, environmental concerns, and related safety. (Degree Credit)

**PRNT 086 F Advanced Flexography 4 Units**

**Advisory:** PRNT 085 F  
54 hours lecture and 54 hours lab per term. This advanced course will provide the student with advanced technical aspects of flexographic press operation for multiple color printing. Students will practice pre-press techniques and develop advanced flexographic press skills on a narrow web label press. Advanced applications of flexographic processes, design, multi-color prints, plate materials, bar codes, inks, substrates, presses and press equipment, pressroom practices, environmental concerns, and related safety will be discussed. (Degree Credit)

- PRNT 090 F Printing Skills Lab** **0.5-6 Units**  
**Advisory:** Any printing technology class except screen printing classes.  
 Open Entry/Open Exit 27-324 hours lab per term. This advanced course will provide students with an opportunity to practice various printing skills that have developed from completing other printing courses. Students can improve skills in the operation of digital printing equipment, electronic pre-press, large offset press operation, small offset press operation, flexographic press operation, bindery operations, paper specifications, and machine maintenance. (Degree Credit)
- PRNT 091 F Advanced Topics in Printing** **0.5-6 Units**  
 27-324 hours lab per term. This course will provide the student the opportunity to study new and emerging skills and field of studies in the printing industry. This course will be offered in modules for advanced topics. Unit credit may range from .5-3 units per module. Consult class schedule to verify specific topic area and credit offered in a particular module. (Degree Credit)
- PRNT 101 F Introduction to Printing** **3 Units**  
 36 hours lecture and 72 hours lab per term. This is a basic course which covers the technical aspects of the various printing processes and related areas. This course includes instruction in page layout and design using various computer applications including InDesign, Illustrator and Photoshop. Computerized pre-press instruction includes preflighting of files and output on computer-to-plate systems. This course also includes basic instruction in small offset press, flexography, screen printing, digital printing and prepares the student to enter other more advanced printing classes. (CSU) (Degree Credit)
- PRNT 133 F Packaging Production** **3 Units**  
**Advisory:** Working knowledge of Illustration software  
 36 hours lecture and 72 hours lab per term. This course introduces students to the process and technical aspects of designing and creating custom packaging. This course includes instruction in packaging layout and design using various computer applications including InDesign, Illustrator, and Photoshop, as well as in computer-aided drafting software such as Esko's Artios CAD. Course also includes instruction in large format printing and prototype die cutting on a plotting table. (CSU) (Degree Credit)
- PRNT 140 F Color Management** **3 Units**  
**Advisory:** PRNT 101 F  
 36 hours lecture and 72 hours lab per term. This course explores Color Management using G7 Process Control to standardize workflow processes and achieve consistent color reproduction, reduce costs and expand efficiencies in a print environment. This course addresses the challenges of managing color across devices and workflows, defining how to integrate and maintain proven industry practices and standards. This course is workflow training from the creative process through final print output. (CSU) (Degree Credit)
- PRNT 142 F Prepress for Print using Adobe Creative Suite** **3 Units**  
**Advisory:** PRNT 101 F  
 36 hours lecture and 72 hours lab per term. This course is prepress workflow training using Adobe InDesign, Illustrator, Photoshop and Acrobat. Students learn proper file creation and the preflight of client-supplied files through final print output. This course teaches the basics of font management, color spaces, image correction, resolution, discovery of errors through preflight, file repair, proofing, and final output. Design is not the intent of this course. (CSU) (Degree Credit)
- PRNT 145 F Variable Data Imaging** **3 Units**  
**Advisory:** PRNT 075 F and PRNT 101 F  
 36 hours lecture and 72 hours lab per term. This course provides students with exposure to the concepts of variable data printing using XMPie software. Students will explore one-to-one marketing concepts, cross media platforms and how variable data effects these markets. (CSU) (Degree Credit)
- PRNT 152 F Introduction to Electronic Prepress** **4 Units**  
**Advisory:** PRNT 101 F  
 54 hours lecture and 54 hours lab per term. This course covers the technical aspects of electronic prepress. The use of both Macs and PC based computers, using current software in page layout, scanning, design, typography, file management for printers will be taught. This class is part of the new industrial image skills training program. (CSU) (Degree Credit)
- PRNT 171 F Offset Presswork** **6 Units**  
**Advisory:** PRNT 101 F or one year industrial experience or two semesters of articulated high school graphics.  
 72 hours lecture and 126 hours lab per term. This is a basic course which introduces the technical aspects of lithographic sheet-fed offset presswork for those seeking initial employment in the printing industry. The basic lithographic theory and its application to knowledge and performance of pressroom safety, the feeder, register, pre-production and an exposure to production techniques. (PIA Certification) (CSU) (Degree Credit)
- PRNT 172 F Intermediate Offset Presswork** **6 Units**  
**Prerequisite(s):** PRNT 171 F with a grade of C or better.  
 72 hours lecture and 126 hours lab per term. This intermediate course covers the technical aspects of lithographic, sheeted offset presswork and intermediate lithographic theory. This course is designed for those entering the printing field and are interested in training for large press operation. Course content includes the application to knowledge and performance of pressroom safety, the cylinder system, inking and dampening systems, press make-ready procedures, multicolor printing, press maintenance techniques, and an exposure to intermediate production techniques. Emphasis is on completion of the knowledge certificate by passing the GATF/PIA-SC, Fullerton College examination. This is the completion of the Sheeted Offset Press Certification initiated in the PRNT 171 F prerequisite. (Graphic Arts Technical Foundation - GATF -Certification) (CSU) (Degree Credit)
- PRNT 973 F Advanced Offset Presswork** **6 Units**  
**Prerequisite(s):** PRNT 172 F with a grade of C or better.  
 72 hours lecture and 126 hours lab per term. This is an advanced course designed for students entering the printing field seeking employment. This printing production course covers the intricate reproduction of process lithographic color. The advanced application of press performance, pressroom safety, press feeder systems, the printing units, the inking and dampening systems, four color register, make-ready and advanced production techniques. Emphasis is on completion of the Performance Certificate by passing the GATF/PIA-SC, Fullerton College four color process practical examination and gaining employment. (PIA Certification) (CSU) (Degree Credit)

## Psychology (PSY)

### PSY 101 F General Psychology

**3 Units**

54 hours lecture per term. This course is a scientific introduction to the major fields of psychology. These fields include research methodology, cognition, memory, perception, sensation, motivation, emotion, learning, and developmental, social, personality, abnormal, and physiological psychology. Students will learn the principles, theories, and research on human actions, emotions, and cognition. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 110)

### PSY 101HF Honors General Psychology

**3 Units**

54 hours lecture per term. This Honors-enhanced course is a scientific introduction to the major fields of psychology including research methodology, cognition, memory, perception, sensation, motivation, emotion, learning, developmental, social, personality, abnormal, and physiological psychology. Students will learn and analyze the principles, theories, and research on human actions, emotions, and cognition. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 110)

### PSY 110 F Introduction to Applied Psychology

**3 Units**

54 hours lecture per term. In this course, students apply psychological principles, theories and research to specific situations and phenomena. Psychological principles will be applied to situations that might occur during college life, during personal familial and social experiences, in one's career or at school, or in the context of mental health and well-being. This course is not the same as PSY 101 F and cannot be taken in place of it. (Degree Credit) (CSU)

### PSY 120 F Human Sexuality

**3 Units**

54 hours lecture per term. This course covers a broad field in which many cultural, psychological and physiological variables interact in relation to sexual development, attitudes and behaviors. The methods of scientific psychology are utilized to improve understanding of a broad range of behaviors ranging from healthy to dysfunctional within mainstream modern American culture and American minority groups as well as peoples of other cultures and historical eras. Discussion of differing cultural and moral perspectives is utilized to assist students in making a critical assessment of the nature of the sexual self as well as intimate human relationships within their own community and the world. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PSY 130)

### PSY 131 F Cross Cultural Psychology

**3 Units**

54 hours lecture per term. This course is an introduction to culture's influence on human behavior and mental processes. Beginning with an examination of theoretical definitions of culture, the course covers a broad range of theories and research findings regarding cultural influences on human behavior and cognitive processes (life-span development, abnormal behavior and mental health, self-concept, emotion, motivation, learning, intelligence, perception, memory, communication, social cognition, and social behavior). The diversity of human expression is examined in contexts ranging from everyday modes of functioning to family and work relationships. By providing students with a non-judgmental understanding of how culture influences human behavior, this course will make them more equipped to interact in a world where there is increasing contact among different cultures. In addition, students will gain knowledge in cross-cultural research methodology. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### PSY 139 F Developmental Psychology - Life Cycle

**3 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF, with a grade of C or better  
54 hours lecture per term. This course explores the entire lifespan, including infancy, childhood, adolescence, adulthood, old age, and death. Students will study and evaluate psychological, sociological, and biological theories and facts related to human development. Physical, social, emotional, intellectual, cognitive and moral developments are among the topics covered. Students will study and evaluate research methodologies and the many factors thought to influence healthy development. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 180)

### PSY 145 F Child Psychology

**3 Units**

54 hours lecture per term. In this course, the psychology of development will be studied from the prenatal stage through adolescence across the domains of physical, cognitive and psychosocial changes. Theoretical viewpoints and research findings will be applied to real-life situations. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### PSY 161 F Elementary Statistics for Behavioral Science

**4 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance.

72 hours lecture per term. This course introduces students to descriptive and inferential statistical methods. These methods are essential to the understanding, interpretation, and performance of scientific research. Topics covered include presentation of graphic data, probability theory, hypothesis testing, correlation analysis, analysis of variance, and basic research design. Experience with calculators and computers is provided. (Degree Credit) (CSU) (UC Credit Limitation; PSY 161 F, PSY 161HF, MATH 120 F, MATH 120HF and SOSC 120 F, combined; maximum credit one course) (AA GE, CSU GE, IGETC (C-ID: MATH 110)

### PSY 161HF Honors Elementary Statistics for Behavioral Science

**4 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance.

72 hours lecture per term. This Honors-enhanced course introduces students to descriptive and inferential statistical methods. These methods are essential to the understanding, interpretation, and performance of scientific research. Topics covered include presentation of graphic data, probability theory, hypothesis testing, correlation analysis, analysis of variance, and basic research design. Experience with calculators and computers is provided. (Degree Credit) (UC Credit Limitation; PSY 161 F, PSY 161HF, MATH 120 F, MATH 120HF and SOSC 120 F combined, maximum credit one course) AA GE, CSU GE, IGETC (C-ID: MATH 110)

### PSY 199 F Psychology Independent Study

**1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

**PSY 202 F Research Methods in Psychology 4 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF and PSY 161 F or PSY 161HF with a grade of C or better.

54 hours lecture and 54 hours lab per term. This course is designed for students who wish to explore in greater depth the theories, concepts, and research areas of methods of modern day psychology. Emphasis is on the scientific study of human behavior and mental processes using experimental and other research strategies. Skills in designing, implementing, analyzing, and writing scientific research studies will be included. Opportunities for field experiences in various psychological settings, such as research centers and regional psychological conferences are available. Consideration of research in multicultural contexts is addressed. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 205B)

**PSY 202HF Honors Research Methods in Psychology 4 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF and PSY 161 C or PSY 161HF with a grade of C or better.

54 hours lecture and 54 hours lab per term. This Honors-enhanced course is designed for students who wish to explore in greater depth the theories, concepts, and research areas of methods of modern day psychology. Emphasis is on the scientific study of human behavior and mental processes using experimental and other research strategies. Skills in designing, implementing, analyzing, and writing scientific research studies will be included. Opportunities for field experiences in various psychological settings, such as research centers and regional psychological conferences, are available. Consideration of research in multicultural contexts is addressed. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 205B)

**PSY 219 F The Human Services 3 Units**

54 hours lecture per term. This course covers the history and philosophy of the human services, the needs of various client groups, and differences between practice settings. Goals and services of various human service agencies will be explored through field visits, case studies, service learning, and guest speakers. Career preparation for various human service positions will be covered. (Degree Credit) (CSU)

**PSY 221 F The Brain and Behavior 3 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF with a grade of C or better

54 hours lecture per term. This course examines the neurophysiological and biological processes associated with behavior and mental processes. Emphasis is placed on the structure and function of the brain and other central nervous system structures. Related processes such as the autonomic nervous system, the endocrine system and the immune system also are addressed. Some of the specific topics studied in the context of the brain include learning, sensation, perception, emotion, motivation, cognition, relationships memory, stress, psychological disorders and brain dysfunction. (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 150)

**PSY 222 F Abnormal Psychology 3 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF, with a grade of C or better

54 hours lecture per term. This course presents a scientific survey of the sub-field of psychology interested in researching the nature and causes of deviant or unusual human behavior both within and across cultures. This course surveys types of abnormal behavior, the process of assessing and diagnosing abnormal behavior, the therapeutic modalities used to treat abnormal behavior, and the scientific methods used to conduct research on abnormal behavior. This course draws upon DSM diagnostic criteria to classify abnormal behavior, and humanistic, cognitive, behavioral, cross-cultural, psychodynamic, and biologically-based models and theories to frame an understanding of abnormal behavior. Issues relating to research, treatment and forensic psychology are considered. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 120)

**PSY 233 F The Psychology of Adjustment 3 Units**

54 hours lecture per term. In this course, students will study a variety of types of adjustment, both functional and dysfunctional. For example, students might study emotional, behavioral or cognitive adjustment in the family or work setting. Students also will study the factors that seem to produce functional and dysfunctional adjustment as well as common treatments for dysfunctional adjustment. Such treatments might include cognitive therapy, humanistic therapy, behavior modification, systems therapy, or stress management. (Degree Credit) (CSU) AA GE (C-ID: PSY 115)

**PSY 251 F Social Psychology 3 Units**

54 hours lecture per term. This course presents a scientific survey of the sub-field of psychology that seeks to understand the nature, causes, and influences of the social context upon the individual and of the individual upon the social context. In this survey course, students will be exposed to basic theories, concepts, and empirical findings in such areas as social perception, social cognition, prejudice, discrimination, interpersonal attraction, conformity and obedience, bystander effects, social aggression, group dynamics, attribution theory and development of self in the social setting. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 170)

**PSY 251HF Honors Social Psychology 3 Units**

54 hours lecture per term. This Honors-enhanced course presents a scientific survey of the sub-field of psychology that seeks to understand the nature, causes, and influences of the social context upon the individual and of the individual upon the social context. Students will be exposed to basic theories, concepts, and empirical findings in such areas as social perception, social cognition, prejudice, discrimination, interpersonal attraction, conformity and obedience, by-stander effects, social aggression, group dynamics, attribution theory, and development of self in the social setting. As an Honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 170)

**PSY 299 F Psychology Independent Study - Advanced 1 Unit**

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of the research process and literature reviews through individual study and small group conferences. Students successfully completing this course will be awarded elective units in the Social Sciences area. Approval of the instructor is required. (Degree Credit) (CSU)

## Reading (READ)

**READ 027 F Basic Study Skills 3 Units**

54 hours lecture per term. This course is designed to help students with limited academic backgrounds experience college success by overcoming college anxiety and by taking responsibility for their college experience. Intensive practice and guidance in campus orientation, organizing, note taking, textbook mastery and test-taking. Pass/No Pass only.

**READ 036 F Basic Reading 3 Units**

54 hours lecture and 36 hours lab per term. This course includes instruction in basic reading fundamentals. Paragraphs, short essays, and longer texts will be read with an emphasis on comprehension, vocabulary development, and study techniques. Pass/No Pass only.

**READ 056 F Developmental Reading 3 Units**

**Prerequisite(s):** READ 036 F with a grade of Pass or recommended score on the placement test.

54 hours lecture and 36 hours lab per term. This course is recommended for students whose reading placement test scores indicate a substantial need for reading improvement. This course introduces students to several skills in reading such as main idea, relevance of detail, vocabulary in context, and inference building to enable greater success in college courses. Letter Grade or Pass/No Pass option.

**READ 096 F Preparation for College Reading 3 Units**

**Prerequisite(s):** READ 056 F with a grade of C or Pass or placement exam.

54 hours lecture and 18 hours lab per term. This course will prepare students for the demands of college reading in academic subjects. Content area reading, essays, and journal articles will be analyzed with an emphasis on comprehension, general and academic vocabulary enhancement, study skills techniques, critical thinking, organizational structure, and reading within various disciplines. This course fulfills the reading requirement for graduation. Letter Grade or Pass/No Pass option.

**READ 101 F Academic Literacy: Analyses and Strategies 3 Units**

54 hours lecture per term. This course will prepare students for the demands of college reading in academic subjects. Content area reading, essays, and journal articles will be analyzed with an emphasis on comprehension, general and academic vocabulary enhancement, study skills techniques, critical thinking, organizational structure, and reading within various disciplines. This course fulfills the reading requirement for graduation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**READ 127 F College Literacy Skills 2 Units**

36 hours lecture per term. This course has students learning strategies needed to succeed in college. Emphasis is placed on disciplinary literacy, learning literacy, and digital literacy. Each type of literacy is examined in detail and strategies for reading in each type of literacy are practiced and applied. An integrated approach to navigating and assimilating all three literacies for successful college course completion will be developed. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**READ 140 F Digital Literacy for Lifelong Learning 3 Units**

54 hours lecture per term. This transfer-level course prepares students for the academic and critical world of digital literacy. Students will learn how to manage their own learning in digital environments. Emphasis is placed on participation, decoding, making meaning and analyzing to develop literacy in the digital age. A final emphasis is on using digital resources for content creation. Letter Grade or Pass/No Pass Option. (Degree Credit) (CSU)

**READ 142 F College Reading: Logical Analysis and Evaluation 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F with a grade of C or better.

72 hours lecture per term. This course offers the student the opportunity to develop critical reading skills as it relates to a critical thinking disposition. Emphasis is placed on learning the strategies necessary to analyze and evaluate the validity and logic encountered in academic readings. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

## Real Estate (RE)

**RE 101 F Principles of Real Estate 3 Units**

54 hours lecture per term. This course covers the fundamentals of California real estate. The development of real estate in California and an introductory study of ownership, appraisal, law, practices, financing, land and location values, transfers, trends, regulations, and economic effects are stressed. This course fulfills the educational prerequisite for California state licensing requirements. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 102 F Legal Aspects of Real Estate 3 Units**

54 hours lecture per term. This course covers California real estate property law. Topics include acquisitions and transfers, methods and incidents of ownership, easements, fixtures, land descriptions, recording, covenants, conditions and restrictions, zoning ordinances, leases, brokers, escrow, title insurance and probate proceedings. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 103 F Escrow 3 Units**

54 hours lecture per term. This course discusses the methods and techniques of escrow procedure for various types of real estate transactions, including the legal/ethical responsibilities engaged in escrow work. This course fulfills the educational prerequisite for California state licensing requirements. (Degree Credit) (CSU)

**RE 201 F Real Estate Practice 3 Units**

54 hours lecture per term. This course covers professional aspects of the real estate business. Topics include an overview of the real estate industry, ethics and licensing requirements; hands-on completion of contracts, forms, and disclosure documents; prospecting strategies for obtaining clients; listing properties and servicing those listings; marketing techniques; strategies for showing property; obtaining and handling offers; closing sales transactions; financing, escrow, title and taxation issues; and 1031 exchange requirements for investment property. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 202 F Real Estate Finance 3 Units**

54 hours lecture per term. This course covers various financing options for California real estate transactions. Topics include government loan programs, creative financing, loan sources, types of lenders, financing investment property, foreclosures, first-time buyer programs, solving financing challenges for low-to-moderate income purchasers, the problems, policies, and risks involved in financing a variety of real estate properties. Techniques of using security devices, legal aspects of mortgages and related instruments, return of mortgage and equity capital, where and how to best obtain funds, procedures in financing real estate sales and exchanges, governmental impact, junior financing and mathematics of real estate finance are also included. This course fulfills education prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)



**RE 203 F Appraisal: Residential****3 Units**

54 hours lecture per term. This course is designed to interpret real estate valuation procedures, examine real estate appraisal used in establishing real estate market values, and develop the knowledge and skills necessary for application or interpretation of appraisal information. Topics include the uniform standards of professional appraisal practice, location analysis and site evaluation, the appraisal process, reproduction cost estimating, depreciation, market data and interpretation, cost, income approaches to value, and the appraisal report. NOTE: Course qualifies for continuing education for real estate licensees. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

**RE 204 F Appraisal: Income****3 Units**

54 hours lecture per term. This course covers property other than the single-family residence. The income approach and capitalization techniques are emphasized. Also included is an in-depth study of the following: discounted cash flow, valuation of partial and leasehold interests, and uniform standards of professional appraisal practice, interpretation, cost and income approaches to value, and the appraisal report. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

**RE 205 F Property Management****3 Units**

54 hours lecture per term. This course covers the management, maintenance, rehabilitation, purchase, and sale of income property. It is intended for property owners and those wishing to become property managers. Topics covered in the course include management of residential, commercial, and industrial properties. Discussions for these various types of properties will revolve around examinations of leases and lease negotiation, tenant relations, maintenance, modernization and decoration, rehabilitation, insurance, tax aspects, office management, public relations, and advertising. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 206 F Real Estate Economics****3 Units**

54 hours lecture per term. This course covers the economic principles used to analyze the impact that national, regional, community, and neighborhood trends have on real estate values. General economic theory and applied real estate practices are linked. Students will apply these principles in order to analyze an investment on an actual multi-unit apartment building. This course fulfills the educational prerequisite for California state licensing requirement and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 207 F Mortgage Loan Brokering in California****3 Units**

54 hours lecture per term. This course covers the aspects of mortgage brokering operations. Topics include understanding the history of the mortgage loan brokerage business; developing and marketing your own mortgage loan brokerage business; developing a business plan; selecting the proper loan for a prospective borrower; understanding and completing Federal Truth in Lending compliance and disclosure reports; pre-qualifying prospective borrowers; completing a loan application package; calculating an underwriting worksheet, and identifying potential "Red Flag" lending problems. NOTE: Course meets Department of Real Estate Requirements for Broker and Salesperson licenses. (CSU) (Degree Credit)

**RE 208 F Basic Appraisal Principles and Procedures****3.5 Units**

63 hours lecture per term. This course meets the requirements of the Appraisal Qualifications Board from the Appraisal Foundation. The emphasis of this course is on residential real estate. This course covers the basic real estate appraisal principles, basic real estate appraisal procedures, and meets the license requirements for all levels of appraisal licenses. It is required for the trainee licensee, residential license, certified residential license, and certified general license. This course qualifies with the California Department of Real Estate as a statutory/pre-license real estate course for both the salesperson and broker education requirements. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 209 F Residential Real Estate Appraisal****3.5 Units**

63 hours lecture per term. This course focuses on developing an understanding of residential real estate appraisal. Course meets the license requirements for all appraisal licenses, for broker and salesperson licenses, as well as Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 210 F Advanced Residential Appraisal Applications and Residential Report Writing****3.5 Units**

63 hours lecture per term. This course meets the requirements of the Appraisal Qualifications Board of the Appraisal Foundation. This course covers advanced residential applications and case studies, as well as residential report writing and case studies. This course meets the license requirements for all levels of appraisal licenses. It is required for the trainee license, residential license, certified residential license, and the certified general license. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 212 F Uniform Standards of Professional Appraisal Practice (USPAP)****1 Unit**

18 hours lecture per term. This course is designed to meet the requirements of the Appraisal Qualifications Board (AQB) of the Appraisal Foundation for state licensing and certification. This course includes the national exam as required by the AQB. Completion of this course and successful completion of the three-hour national exam (the course final exam) are required by the California Office of Real Estate Appraisers (OREA) for initial trainee licensure. (CSU) (Degree Credit)

**RE 252 F Advanced Real Estate Finance****3 Units**

Pass/No Pass or Letter Grade option. 54 hours lecture per term. This course covers real estate investment through the application of financial principles including probability, risk analysis, value relationships, and capitalization of income to make informed property investment decisions. Emphasis is placed on an understanding of investment financing options, pro forma financial statements, effects of leverage and cash flow operating statements and highest and best use. Topics include understanding market trends by real estate sector and developing strategies for decision-making alternatives for acquisition, holding period, sale, and tax-deferred exchanges. This course fulfills education prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (Degree Credit) (CSU)

**RE 298 F Advanced Topics in Real Estate****0.5-3 Units**

0-54 hours lecture and 0-54 hours lab per term. This course offers advanced real estate topics designed to enhance job skills, expand the student's knowledge of the marketplace, and increase employment opportunities. Consult the class schedule to verify specific topic area and credit for a particular semester. (CSU) (Degree Credit)

## Social Work and Human Services (SWHS)

Division: Social Sciences

### SWHS 120 F Social Work and Human Services 3 Units

**Prerequisite(s):** PSY 219 F with a grade of C or better.

54 hours lecture per term. This course offers the student a supervised field experience in a community organization, agency, or institution, allowing the student to apply knowledge and learn new skills outside of the classroom environment. This field experience will be a mandatory service learning component in the course. Class meetings provide the academic element to this experiential course offering and reinforces the application of concepts. This course is designed to provide the student with an opportunity to develop skills that would facilitate gaining employment in human services and social work-related fields. It introduces and allows students to apply the code of ethics and to practice standards and guidelines in social work. Pass/No Pass or Letter Grade option. (Degree Credit) (CSU)

## Social Sciences (SOSC)

### Courses

#### SOSC 120 F Introduction to Probability and Statistics 4 Units

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F with a C or better or math skills clearance.

72 hours lecture per term. This course is an introduction to probability and statistics and covers descriptive and inferential statistics as well as the probabilistic basis of statistical inference. Computers and calculators will be utilized. Data sets and problems will be from anthropology, economics, geography, political science, psychology and sociology. This course is open to all students who meet the prerequisite, but is required for anthropology and sociology majors. This course is strongly recommended for economics, ethnic studies, geography and political science majors. Psychology majors should seek the advice of a counselor before choosing between PSY 161 F and SOSC 120 F. Students who receive credit for SOSC 120 F may not receive credit for MATH 120 F. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 125, MATH 110)

#### SOSC 125 F Introduction to Research Methods 3 Units

**Prerequisite(s):** SOC 101 F or SOC 101HF with a grade of C or better

54 hours lecture per term. This course examines fundamental elements of empirical research and the ways social scientists think critically. This course includes attention to the nature of theory, hypotheses, variables and ethics of research. Application of qualitative and quantitative analytic tools including logic and research design, such as survey, observational, experimental, case study, and comparative historical research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 120)

#### SOSC 130 F Introduction to LGBTQ Studies 3 Units

54 hours lecture per term. This introductory course examines a broad range of contemporary lesbian, gay, bisexual, transgender, and queer issues in various contexts including bio-medical, sociological, political, racial and sexual. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SJS 130)

## Sociology (SOC)

### SOC 101 F Introduction to Sociology 3 Units

54 hours lecture per term. This course introduces concepts, theories and vocabulary associated with the field of sociology. The major sociological perspectives are explored surrounding: social control, social interaction, social differentiation, and social institutions. The processes of social change are understood in the context of collective human behavior. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 110)

### SOC 101HF Honors Introduction to Sociology 3 Units

54 hours lecture per term. This Honors-enhanced course introduces concepts, theories and vocabulary associated with the field of sociology. The major sociological perspectives are explored surrounding: social control, social interaction, social differentiation, and social institutions. The processes of social change are understood in the context of collective human behavior. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 110)

### SOC 102 F Social Problems 3 Units

54 hours lecture per term. This course investigates social conditions that contribute to social problems in the U.S. and globally. This course focuses on globalization, poverty, racial and ethnic discrimination, gender stratification and sexism, ageism, crime and the criminal justice system; substance abuse; population growth, environmental problems and sustainability; and war and terrorism. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 115)

### SOC 198 F Sociology Internship 1 Unit

60 hours supervised unpaid internship or 75 hours paid internship per term. This course allows students to increase their knowledge of sociology through work with a social service agency or organization. (Degree Credit) (CSU) (UC Credit Limitation; UC review required)

### SOC 199 F Sociology Independent Study 1 Unit

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

### SOC 201 F Dying and Death 3 Units

54 hours lecture per term. This course includes various perspectives on death, both cross-cultural and historical. Examines beliefs, traditions, rituals and practices surrounding death in the U.S.; health care systems (the hospital and the dying patient, hospice, etc.); death and the process of dying; bioethics - dying in the technology age; euthanasia suicide, funerals, grief and bereavement; the law and death, including living wills, organ donation, and autopsies; also life after death - old and new meanings. Field trips outside of regularly-scheduled class time may be required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

- SOC 230 F Sociology of Gender** **3 Units**  
54 hours lecture per term. This course focuses on a sociological analysis of the social construction of masculinity and femininity, historically and cross-culturally. Examines the debates on sex and gender, and analyzes the impact of economic and political changes on gender expectations and practices. This course focuses on macro-analyses of how institutions shape gender and micro-analyses of how individuals are socialized and how they practice gender. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 140)
- SOC 230HF Honors Sociology of Gender** **3 Units**  
54 hours lecture per term. This Honors-enhanced course focuses on a sociological analysis of the social construction of masculinity and femininity, historically and cross-culturally. It examines the debates on sex and gender and analyzes the impact of economic and political changes on gender expectations and practices. This course focuses on macro-analyses of how institutions shape gender and micro-analyses of how individuals are socialized and how they practice gender. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 140)
- SOC 250 F Sociology of Aging** **3 Units**  
54 hours lecture per term. This course is an introduction of the study of aging. It is a sociological review of the characteristics, strengths and problems of older persons. Exploration includes basic theories, terminology and concepts related to aging. Health, sexuality, social supports, caregiving, living arrangements, economics and end-of-life issues will also be discussed. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 275 F Marriage and Family** **3 Units**  
54 hours lecture per term. This course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include: gender roles, love, singlehood, courtship, marriage, domestic partnerships, communication, sexuality, parenting, conflict, domestic violence, economics, divorce, step-families, diversity in families (historically and cross-culturally) and future family trends. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 130)
- SOC 275HF Honors Marriage and Family** **3 Units**  
54 hours lecture per term. This Honors-enhanced course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include: gender roles, love, singlehood, courtship, marriage, domestic partnerships, communication, sexuality, parenting, conflict, domestic violence, economics, divorce, step-families, diversity in families (historically and cross-culturally) and future family trends. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) CSU GE, AA GE, IGETC (C-ID: SOCI 130)
- SOC 277 F Sociology of Religion** **3 Units**  
54 hours lecture per term. This course is an analysis of religion as a social institution. Emphasis will be placed on the influence that religion has on members of U.S. society by examining the role religion plays in people's lives, and legitimates some existing social and economic arrangements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 277HF Honors Sociology of Religion** **3 Units**  
54 hours lecture per term. This Honors-enhanced course is an analysis of religion as a social institution. Emphasis will be placed on the influence that religion has on members of U.S. society by examining the role religion plays in people's lives, and legitimates some existing social and economic arrangements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 280 F Media, Culture and Society** **3 Units**  
54 hours lecture per term. This course is a critical analysis of media and culture from a sociological perspective, including the ways in which media is shaped and influenced by society, culture and individuals. Topics include the role of media in ideology, identity and interaction; race, class and gender; economics and politics; social change, technology and globalization. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 285 F Drugs and Society** **3 Units**  
54 hours lecture per term. This course introduces concepts, theories and perspectives associated with the sociological analysis of drugs and alcohol. The definitions of various types of drug use, as well as drug abuse, and drug dependence will be addressed. The pharmacological perspective will also be explained, including the factors that influence drug action and the classification of psychoactive drugs and their effects. Legal drugs, such as alcohol, tobacco, and psychotherapeutic drugs will be discussed and analyzed using the sociological perspective. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 285HF Honors Drugs and Society** **3 Units**  
54 hours lecture per term. This Honors-enhanced course introduces concepts, theories and perspectives associated with the sociological analysis of drugs and alcohol. The definitions of various types of drug use, as well as drug abuse, and drug dependence will be addressed. The pharmacological perspective will also be explained, including the factors that influence drug action and the classification of psychoactive drugs and their effects. Legal drugs, such as alcohol, tobacco, and psychotherapeutic drugs will be discussed and analyzed using the sociological perspective. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 290 F Sociology of Race and Ethnicity** **3 Units**  
54 hours lecture per term. This course is a sociological analysis of race, ethnicity and racism. Coursework includes an examination of cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 150)
- SOC 290HF Honors Sociology of Race and Ethnicity** **3 Units**  
54 hours lecture per term. This Honors-enhanced course is a sociological analysis of race, ethnicity and racism. Coursework includes an examination of cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 292 F Introduction to Criminology** **3 Units**  
54 hours lecture per term. This course is a study of theories of crimes and criminal behavior, including an explanation of crime, its causes, and how crime is measured. Major sociological and social science theories will be explored surrounding the issues of crime and criminal behavior. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 160)

**SOC 292HF Honors Introduction to Criminology 3 Units**

54 hours lecture per term. This Honors-enhanced course is a study of theories of crimes and criminal behavior, including an explanation of crime, its causes, and how crime is measured. Major sociological and social science theories will be explored surrounding the issues of crime and criminal behavior. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**SOC 299 F Sociology Independent Study - Advanced 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

## Spanish (SPAN)

**SPAN 101 F Elementary Spanish I 5 Units**

90 hours lecture per term. This course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE (C-ID: SPAN 100)

**SPAN 101HF Honors Elementary Spanish I 5 Units**

90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. The course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE (C-ID: SPAN 100)

**SPAN 102 F Elementary Spanish II 5 Units**

**Prerequisite(s):** SPAN 101 F with a grade of C or better or Pass or SPAN 101HF with a grade of C or better or one year of high school Spanish with a grade of C or better

90 hours lecture per term. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 110)

**SPAN 102HF Honors Elementary Spanish II 5 Units**

**Prerequisite(s):** SPAN 101 F with a grade of C or better or Pass or SPAN 101HF with a grade of C or better or Pass or one year of high school Spanish with a grade of C or better

90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 110)

**SPAN 200 F Conversational Spanish 2 Units**

**Prerequisite(s):** SPAN 102 F with a grade of "C" or better or "Pass" or SPAN 102HF with a grade of "C" or better or two years of high school Spanish with a grade of "C" or better.

Letter Grade or Pass/No Pass option. 36 hours lecture per term. This course focuses on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components are included. This course may be taken concurrently with SPAN 203 F, 204 F, 205 F, and 206 F. Instruction will be conducted entirely in Spanish. (Degree Credit) (CSU)

**SPAN 201 F Spanish for the Spanish Speaker 5 Units**

**Advisory:** Native or near-native Spanish language proficiency.

90 hours lecture per term. This course is designed to improve the communicative skills in Spanish for bilingual students. Although the course addresses all four skills of language learning - listening comprehension, speaking, reading and writing - the emphasis of the course is to improve reading and writing skills in Spanish through the study of grammar, spelling, vocabulary and composition. Selective readings of Hispanic writers will be used to enhance knowledge of literature and culture. This class is conducted primarily in Spanish. Students that take either SPAN 101 F or SPAN 102 F or SPAN 203 (or all of these) may not receive credit for SPAN 201 F. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit, one course.) AA GE, CSU GE, IGETC

**SPAN 203 F Intermediate Spanish III 4 Units**

**Prerequisite(s):** SPAN 102 F with a grade of C or better or Pass or SPAN 102HF with a grade of C or better or Pass or two years of high school Spanish with a grade of C or better.

72 hours lecture per term. The course includes development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit, one course) AA GE, CSU GE, IGETC

**SPAN 204 F Intermediate Spanish IV 4 Units**

**Prerequisite(s):** SPAN 201 F or SPAN 203 F, with a grade of Pass or C or better or three years of high school Spanish with a grade of C or better.

72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Spanish and Latin American culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 210)

**SPAN 205 F Introduction to Spanish Literature 3 Units**

**Prerequisite(s):** SPAN 204 F with a grade of C or better or Pass or four years of high school Spanish with a grade of C or better  
54 hours lecture per term. This survey course begins with the Middle Ages to the present covering history, culture and literary writings from Spain. The instruction is in Spanish. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**SPAN 206 F Introduction to Latin American Literature 3 Units**

**Prerequisite(s):** SPAN 204 F with a grade of C or better or Pass or four years of high school Spanish with a grade of C or better  
54 hours lecture per term. This survey course begins with pre-Columbian literature to the present covering history, culture and literary writings from Latin American countries. The instruction is in Spanish. This course fulfills the Multicultural Education Requirement for graduation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**SPAN 207 F Children's Literature/Spanish 3 Units**

**Prerequisite(s):** SPAN 203 F with a grade of C or better or Pass  
This is an introductory course in children's literature of Spanish-speaking countries and books for children and adolescents published in Spanish by Hispanic authors. The focus is on the genres that constitute Spanish children's literature, from its multiple origins in folklore to contemporary fiction, non-fiction, poetry, drama and picture books. The course enables students to identify representative and meritorious texts in Spanish that reflect the cultural background, interests, values and concerns of Spanish-speaking children. It also provides extensive practice in oral and written expression through analysis, discussion and interpretation of Hispanic literature and culture. This course is recommended for high-intermediate students, as well as teachers in K-12. This course is taught entirely in Spanish. (Degree Credit) (CSU) (UC) AA GE, CSU GE

## Technology-Related Courses (TECH)

**TECH 080 F Federal Aviation Administration Drone Pilot Test Preparation 1 Unit**

18 hours lecture per term. This course reviews and prepares students to take the Federal Aviation Administration's initial aeronautical knowledge test, and help complete FAA Form 8710-13 for a remote pilot certificate, through lecture, discussion and individual flying of drones. This course will help guide students on basic aeronautics and operations as they pertain to drone piloting.

**TECH 081 F Technical Mathematics I 3 Units**

54 hours lecture per term. This course covers the use of elementary algebra, geometry, and right triangle trigonometry in the solution of practical problems related to trade and technical areas. This course emphasizes the use of electronic calculators to do the computation. (Degree Credit)

**TECH 082 F Technical Mathematics II 3 Units**

**Prerequisite(s):** TECH 081 F with a grade of C or better.  
54 hours lecture per term. This course covers the study of more advanced algebra, trigonometry, and elementary statistics in the solution of technical problems. This course does not transfer to CSU. (Degree Credit)

**TECH 088 F Technical Science 3 Units**

54 hours lecture per term. This is a course in the fundamental principles of physics, mechanics, heat, light, and strength of materials as applied to practical shop problems. (Degree Credit)

**TECH 108 F Manufacturing Processes 3 Units**

54 hours lecture per term. This course is a general overview course which gives an insight into manufacturing processes and develops an appreciation of the latest manufacturing techniques, materials, as well as skills used in the metal, plastic, and other manufacturing industries. This course also reviews engineering materials and manufacturing processes from the viewpoint of the manufacturer and designer perspective. (CSU) (Degree Credit)

**TECH 127 F Industrial Safety 2 Units**

36 hours lecture per term. This course will cover the basics of safety as it applies to all majors in Technology Education and Engineering. It will include scope, history, objectives, responsibility, and organization of safety as it relates to common industrial equipment and processes. Various OSHA standards and regulations will be covered including general industry regulations such as 29 CFR 1910. (CSU) (Degree Credit)

**TECH 131 F Basic Electricity and Basic Electronics 2 Units**

18 hours lecture and 54 hours lab per term. This course provides the student with introductory knowledge of electricity and electronics to prepare for further studies in entertainment technology. This course involves lecture, discussion, and project-based learning projects. This course is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)

**TECH 132 F Basics of Electric Motor Controls 2 Units**

**Prerequisite(s):** TECH 131 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course provides the student with introductory knowledge of electric motor controls and systems to prepare for further studies in entertainment technology. This course involves lecture, discussion, and project-based learning projects. This course is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)

**TECH 135 F Introduction to Programmable Logic Controllers 2 Units**

**Prerequisite(s):** TECH 131 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course introduces the technical theater student to PLC technology utilized in the entertainment industry in both theater and theme parks. This career technical education course involves lecture, discussion, and project-based learning and is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)

**TECH 136 F Computer Integrated Manufacturing and Advanced PLC 3 Units**

**Prerequisite(s):** TECH 135 F, with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course explores advanced technologies in programmable logic controllers for the entertainment industry with focus on theater show control systems and system integration, set up and troubleshooting. This career technical education course involves, lecture, discussion, and project based learning and is required of all theme park technician certificate students. (CSU) (Degree Credit)

**TECH 137 F Electronic Instrumentation and Networking 2 Units**

**Prerequisite(s):** TECH 131 F and TECH 136 F, with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This entertainment industry technology course explores process control, measurements, and data transmission. It includes hands-on project work, troubleshooting, and applied theme park and entertainment workplace situations. This course is required of all Theme Park Technician students. (CSU) (Degree Credit)

**TECH 138 F Electronic Instrumentation and Networking II 2 Units****Prerequisite(s):** TECH 137 F with a grade of C or better**Advisory:** TECH 131 F

18 hours lecture and 54 hours lab per term. This capstone course builds on the knowledge acquired in TECH 137 F to develop advanced competencies in electronic show control, instrumentation, networking for the entertainment industry and theme parks. This course is required of Theme Park CTE certificate students. (CSU) (Degree Credit)

**TECH 150 F Basic Drone Piloting 2 Units**

36 hours lecture and 9 hours lab per term. This course will train students on the principles, guidelines and regulations regarding effective piloting of unmanned aerial vehicles. Safety and ethics associated with drone flight as well as the law will also be stressed. (Degree Credit) (CSU)

**TECH 151 F Applied Drone Piloting 3 Units**

36 hours lecture and 54 hours lab per term. In this course, students will learn the basics of piloting an unmanned aerial system, or drone, and how it can be applied in their preferred career (Administration of Justice, Construction, Cinematography, Environmental Science, Geography, Journalism, Photography, Physical Education, Real Estate, Welding, and many others). Students will gain industry-specific experience with UAS. (CSU) (Degree Credit)

**TECH 155 F Applied Drone Lab 2 Units****Prerequisite(s):** CIS 201 F or ENGR 105 F or TECH 131 F.

**Advisory:** CIS 201 F or ENGR 105 F or TECH 131 F. 18 hours lecture and 54 hours lab per term. In this course, students will learn the basics of unmanned systems and how they work. Students will create a functioning aerial, terrestrial or submersible system. (Degree Credit) (CSU)

**TECH 158 F Advanced Drone Piloting Skills 2 Units****Prerequisite(s):** TECH 150 F or TECH 151 F, with a grade of C or better.

18 hours lecture and 54 hours lab per term. In this course, students will learn advanced drone piloting techniques including multiple drone operations, field operations, night flying, first person view (FPV) piloting, and others. (CSU) (Degree Credit)

**TECH 159 F Counter Drone Operations 2 Units**

36 hours lecture per term. In this course, students will learn the principles and techniques regarding counter drone operations for identification and security. Regulations and laws regarding drone operations will be covered. (CSU) (Degree Credit)

**TECH 160 F Infrared Thermography 2 Units****Advisory:** TECH 150 F.

36 hours lecture per term. This course focuses on how thermography is used for a variety of conditions including monitoring/predictive maintenance and identification. Students will learn how to collect, interpret and analyze infrared data by using a drone and aerial imaging. (CSU) (Degree Credit)

**TECH 165 F Aerial Mapping and Photogrammetry 3 Units**

45 hours lecture and 27 hours lab per term. This course introduces students to the skills in data acquisition, data processing techniques for mapping and by using Pix4D. Students will learn principles of Unmanned Aerial System (UAS) and how to use them to acquire data, create mapping images, point clouds, overlays, and 3D meshes. (CSU) (Degree Credit)

**TECH 199 F Technology and Engineering: Independent Study I 1-3 Units**

54-162 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent lab research problems with staff supervision may be approved. Projects with written reports or outside reading with written reports may be required. (CSU) (UC review required.) (Degree Credit)

**TECH 299 F Technology and Engineering Independent Study II 1-3 Units**

54-162 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent lab research problems with staff supervision may be approved. Project with written report or outside reading with written report is required. (CSU) (UC review required.) (Degree Credit)

## Theatre Arts (THEA)

**THEA 072 F Introduction to Movement and Performance Skills for Musical Theatre 1 Unit**

18 hours lecture and 18 hours lab per term. This course provides an introduction to the techniques and skills necessary for the creation and execution of dance for musical theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

**THEA 073 F Beginning Movement and Performance Skills for Musical Theatre 1 Unit****Prerequisite(s):** THEA 072 F with a grade of C or better

18 hours lecture and 18 hours lab per term. Students will learn beginning level techniques and skills for the creation and execution of dance for Musical Theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

**THEA 074 F Intermediate Movement and Performance Skills for Musical Theatre 1 Unit****Prerequisite(s):** THEA 073 F with a grade of C or better

18 hours lecture and 18 hours lab per term. In this course, students will learn intermediate techniques and skills necessary for the creation and execution of dance for Musical Theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

**THEA 075 F Theatrical City Tours: New York 2 Units**

18 hours lecture and 54 hours lab per term. This course features theatrical city tours to New York City and offers a study of current, classical, and musical plays at Broadway and off-Broadway theaters. Students will travel from Orange County to New York City and spend a week experiencing the New York theatre scene and the "Big Apple". Approximate cost for travel, accommodations and theatre tickets is \$1800.

**THEA 076 F Theatrical City Tours: London 2 Units**

18 hours lecture and 54 hours lab per term. This course features theatrical city tours to London and Stratford-upon-Avon, England and offers a study of current, classical, and musical plays. Students will travel from Los Angeles to London, England and spend a week experiencing the London theatre scene and the English countryside. Approximate cost for travel, accommodations and theatre tickets is \$2400.

**THEA 090 F Introduction to Advanced Topics in Theatre Technology 2-6 Units**

18-54 hours lecture and 18-54 hours lab per term. This course is designed to meet the various needs of technical theatre areas that require advanced training and provide professional growth for persons employed in Technical Theatre. This course will be offered in modules of advanced topics. (Degree Credit)

**THEA 091 F Video and Scenic Projection for the Theatre 2 Units**

18 hours lecture and 54 hours lab per term. This course provides an overview of the use of video and projections and their practical applications for use in the theatre. (Degree Credit)

**THEA 092 F Automated Scenery for the Theatre** 2 Units  
18 hours lecture and 54 hours lab per term. This course provides an overview of the use of automated scenery systems and their practical applications for use in the theatre. (Degree Credit)

**THEA 093 F Rigging for the Theatre** 1 Unit  
54 hours lab per term. This course provides an overview of rigging systems and their practical applications for use in the theatre. (Degree Credit)

**THEA 094 F Systems Maintenance and Troubleshooting for Theatre** 2 Units  
18 hours lecture and 54 hours lab per term. This course provides an overview of the maintenance and troubleshooting of theatrical systems. (Degree Credit)

**THEA 100 F Introduction to the Theatre** 3 Units  
54 hours lecture per term. This course is designed for those students who wish to explore more thoroughly the art of theatrical performance with special attention given to all the contributing elements. This course examines all areas of theatre production through lecture, demonstration, lab participation, small-group discussion, guest performers, and speakers. This course prepares the student for other course offerings in the theatre curriculum. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: THTR 111)

**THEA 104 F Introduction to Theatre Appreciation** 3 Units  
Pass/No Pass or Letter Grade option. 36 hours lecture and 54 hours lab per term. This course is designed to be a study of the combined elements of contemporary theatre through examination of audience/performer relationships and the organization of theatrical production personnel. This course involves the study of current and classical plays, with special emphasis on dramatic analysis and cultural significance. Mandatory attendance at selected group of live theatrical productions is required. Approximate cost of theatre tickets is \$150-225. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: THTR 112)

**THEA 105 F Musical Theatre History** 3 Units  
54 hours lecture per term. This course explores the uniquely American art form that is Musical Theatre. From its early development in the colonial period to the present time, emphasis will be placed on the chronological examination of various musical theatre productions. Students will learn how the composers, librettists, lyricists, choreographers, directors and designers contributed to the formation and the popularity of musical theatre, as it exists today. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**THEA 106 F Beginning Principles of Playwriting** 3 Units  
54 hours lecture per term. This class introduces students to the elements of writing a play for the stage. Topics include dramatic structure, dramatic action, the relationship between dialogue and action, characterization, setting, theme, and point of view. Students will be assigned writing exercises culminating in a one-act play. Students will be expected to act in and direct other students' scenes. (CSU) (Degree Credit) AA GE

**THEA 108 F Multicultural Perspectives in American Theatre** 3 Units  
54 hours lecture per term. This course provides students with critical perspectives on race and gender to engage with Indigenous, Latinx, Black, Asian and LGBTQIA+ theatre within the American cultural landscape as well as the global diaspora. In this introductory class, students will read and engage with contemporary plays that represent and complicate the rich variety of diverse perspectives within America and abroad. This course will explore the genesis of the contemporary Multicultural Theatre landscape, the cultural positionality into which a particular play places itself, and the socio-political climate in which these plays were created. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**THEA 109 F Modern Dramatic Literature** 3 Units  
54 hours lecture per term. This course involves the analysis and research of contemporary dramatic literature. Through the examination of dramaturgical structure, thematic presentation, character development and production design requirements, students will explore how analysis and research can aid in the transforming of a script into a theatrical experience. This course includes play readings, lectures, discussions and student reports. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: THTR 114)

**THEA 121 F Movement for Actors** 3 Units  
36 hours lecture and 54 hours lab per term. This course explores movement as an actor's tool to enhance the physical ability to communicate on stage, focusing on physical awareness, movement improvisation and characterization with concentration on structure, organization, and control of time, space, energy, and sound. Emphasis will be placed on the integration of verbal and non-verbal forms of communication as means to inform and illuminate text. The goal is to achieve the fullest range and clarity of physical and emotional expression of the body as it moves in relation to the surrounding space. Field trips may be required outside of class times. (CSU) (UC) (Degree Credit)

**THEA 122 F Improvisation for Television, Film and Theatre** 2 Units  
18 hours lecture and 54 hours lab per term. This course involves the principles and techniques of improvisational acting designed to increase the actor's creativity, problem solving, collaboration and performance skills. This course also develops student awareness of the importance of the cooperative dynamics of theatre, television and film and the value of the individual actor's creative process as well as emphasizing the individual performance, ensemble work and the development of the actor's physical, vocal, and emotional instrument as it relates to performance. (CSU) (Degree Credit)

**THEA 123 F Acting Techniques** 3 Units  
36 hours lecture and 72 hours lab per term. This course involves the study of contemporary acting techniques based on the Stanislavsky system of acting and is designed as an introductory course for students interested in acting. (CSU) (UC) (Degree Credit)

**THEA 127 F Oral Interpretation** 3 Units  
54 hours lecture per term. This course explores the fundamentals of effective oral presentation before an audience. It includes voice study and diction for the purposes of developing effective reading and correct habits of speech and it develops an appreciation of literature through a literary genre-based approach to oral expression and dramatic analysis. This course is recommended for students interested in teaching, broadcasting, public speaking, and voice-over work. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: COMM 120)

**THEA 129 F Voice for the Actor** 3 Units  
54 hours lecture per term. This course includes the academic study and practical application of the efficient and effective use of the speaking voice, particularly in meeting the unique demands of acting for the stage. Along with an introduction to the International Phonetic Alphabet, emphasis in physical relaxation, breathing techniques, vocal expression, and articulation of general American speech will be covered with attention placed on the individual needs of each student. Focus will be placed on exercises designed to build awareness and adjust breath, diction, and conscious control of speech function. The theories and principles of the course will be applied through written assignments, oral performances, and vocal exercises done in class and at home. (CSU) (UC) (Degree Credit)

**THEA 130 F Acting Workshop****3 Units**

**Advisory:** An audition or interview will be conducted for the purpose of assigning performance roles and technical positions.

54 hours lecture and 108 hours lab per term. This course is a continuation of acting fundamentals with increased emphasis on the application of the principles and theories of creating acting. Additional performance and technical support work in production areas is required. (Degree Credit) (CSU) (UC) (C-ID: THEA 191)

**THEA 131 F Theatre Workshop****1-3 Units**

**Advisory:** An audition or interview will be conducted for the purpose of assigning performance roles and technical positions.

54-162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course provides the lab exploration of student and faculty directing, acting, design, promotion, and technical support work for a live theatrical production. (CSU) (Degree Credit)

**THEA 132 F Beg Resident Theatre Company****0.5-3 Units**

27-162 hours lab per term. This course involves the beginning study and practical development of new and experimental plays for D-Fest or Director's Fest. Students enrolling in this course will serve as playwrights, dramaturges, actors, technicians and production assistants. An audition or interview will be conducted by student directors for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

**THEA 134 F Beginning Theatre Practicum (formerly THEA 133 F)****1-2 Units**

54-108 hours lab per term. This course provides the study and lab exploration of all aspects of theatre production, culminating in a series of public performances in the large proscenium theatre. Additional hours may be required for technical, dress rehearsals, and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)

**THEA 135 F Resident Theatre Company****0.5-3 Units**

27-162 hours lab per term. In this course, students will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

**THEA 136 F Touring Theatre Productions: Rehearsal and Performance****3 Units**

**Advisory:** An audition or interview will be conducted for the purpose of assigning performance roles and technical positions

162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course presents the rigorous requirements of a touring theatrical production. Students are given the opportunity to participate in one or more activities of the production company including acting, directing, stage managing, design, costuming, lighting, scenery, sound, properties and make up. The company will travel locally, nationally, and internationally depending on the year and circumstances. (CSU) (Degree Credit)

**THEA 137 F Introduction to Summer Theatre Workshop****3 Units**

162 hours lab per term. This course involves the introduction to the study and lab exploration of all aspects of theatre production culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purpose of assigning performance roles and technical positions. This course is only offered during summer intersession. (CSU) (UC) (Degree Credit)

**THEA 139 F Beginning Musical Theatre Concert Production****1 Unit**

54 hours lab per term. This course involves the beginning study and exploration of all aspects of musical theatre concert production, culminating in a series of public and touring performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)

**THEA 141 F Introduction to Technical Theatre****4 Units**

54 hours lecture and 54 hours lab per term. This course involves the study and execution of technical theatre principles. Through project-based learning, students will learn the theatrical design and technical practices that apply to scenery, lighting, sound, costumes, make up, properties and scene painting. (Degree Credit) (CSU) (UC)

**THEA 143 F Stagecraft****4 Units**

54 hours lecture and 54 hours lab per term. This course involves the study and execution of theatrical scenery with emphasis on construction, drafting, tools, materials, and their relationship to the design process. Students enrolling in this course will be given hands on practical experience in all the practical aspects of designing scenery for the theater. (Degree Credit) (CSU) (UC) (C-ID: THTR 171)

**THEA 146 F Scene Painting****3 Units**

**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.

Concurrent 36 hours lecture and 54 hours lab per term. This course provides an introduction to, and continued development of, professional scenic artist techniques as they apply to the painting of scenery for the performing arts. This course will include use of brush, roller, spray gun, texturing, rock background, wood graining, wallpaper, masonry, scenic drops and other scene painting techniques. (CSU) (UC) (Degree Credit)

**THEA 148 F Introduction to Theatre Crafts Lab (formerly THEA 142 F)****1-2 Units**

54-108 hours lab per term. This course is an introduction to the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop introductory level skills in technical theatre. (CSU) (UC) (Degree Credit)

**THEA 151 F Properties: Design and Construction****3 Units**

**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.

Concurrent 36 hours lecture and 54 hours lab per term. This course introduces the student to the processes and skill-sets that are used on a daily basis in the world of stage properties. This course involves the study and execution of property construction, research methods, upholstery, molding and casting, as well as the creation of stage food, animals and stage weaponry. This course is also intended to orient students to the aspects of properties as they relate to a properties master and a properties artisan. (CSU) (Degree Credit)



- THEA 152 F Beginning Theatre Crafts Lab** 1-2 Units  
*Prerequisite(s)*: THEA 148 F with a grade of C or better  
 54-108 hours lab per term. This course covers beginning construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop beginning level skills in technical theatre. (CSU) (UC) (Degree Credit)
- THEA 153 F Introduction to Stage Crew Activity (formerly THEA 149 F)** 0.5-3 Units  
 27-162 hours lab per term. This course is an introduction to the practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (C-ID: THTR 192)
- THEA 155 F Beginning Summer Theatre Workshop** 3 Units  
*Prerequisite(s)*: THEA 137 F with a grade of C or better  
 162 hours lab per term. This course involves the beginning study and lab exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. (CSU) (UC) (Degree Credit).
- THEA 156 F Intermediate Summer Theatre Workshop** 3 Units  
*Prerequisite(s)*: THEA 155 F with a grade of C or better  
 162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. This course involves the intermediate study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)
- THEA 157 F Advanced Summer Theatre Workshop** 3 Units  
*Prerequisite(s)*: THEA 156 F with a grade of C or better  
 162 hours lab per term. This course involves the advanced study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. (CSU) (UC) (Degree Credit)
- THEA 158 F Introduction to Director's Practicum** 0.5-3 Units  
 27-162 hours lab per term. This course is the introductory laboratory exploration in acting and technical theatre as it pertains to student directed one-act productions. Actors and technicians will work collaboratively with student directors culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning roles and technical positions. (CSU) (Degree Credit)
- THEA 159 F Beg Stage Crew Activity** 0.5-3 Units  
*Prerequisite(s)*: THEA 153 F with a grade of C or better  
 27-162 hours lab per term. This course involves the beginning practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (CSU) (UC) (C-ID: THTR 192)
- THEA 160 F Introduction to Sound Technology** 3 Units  
*Corequisite(s)*: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This course introduces the student to sound technology for the theatre with emphasis placed on the physical properties of sound and the audio equipment used to bring sound to the stage and the concert hall. (CSU) (Degree Credit) AA GE
- THEA 161 F Sound Reinforcement Techniques** 2 Units  
*Prerequisite(s)*: THEA 160 F with a grade of C or better.  
*Corequisite*: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course is designed to give the student understanding and working knowledge of both the science of sound reinforcement and the practical application of audio equipment for theatrical events, concerts and other public events. (CSU) (Degree Credit) AA GE
- THEA 162 F Sound Design for the Theatre** 2 Units  
*Corequisite(s)*: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.  
 18 hours lecture and 54 hours lab per term. This course develops the students' understanding and working knowledge of sound design principles and practices for the theatre. Project based learning provides the student with an introduction to audio equipment and an understanding of the craft and process of sound design. (CSU) (Degree Credit) AA GE
- THEA 170 F Beginning Theatrical Lighting (formerly THEA 144 F)** 3 Units  
*Corequisite(s)*: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This course involves the beginning study and execution of stage lighting with emphasis on equipment, control, color and their relationship to lighting design for the theatre. (CSU) (UC) (Degree Credit)
- THEA 171 F Beginning Theatrical Costuming and Design (formerly THEA 145 F)** 3 Units  
*Corequisite(s)*: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.  
 Concurrent 36 hours lecture and 54 hours lab per term. This course is an introduction to basic theatrical costuming. This course is designed to teach the student about costume design, costume history, costume construction, mask making, fabric modification and the working of a wardrobe crew as it applies to the entertainment industry. This course will culminate in a final project that reflects the student's creativity. (Degree Credit) (CSU) (UC) (C-ID: THTR 174)

- THEA 172 F Stage Makeup (formerly THEA 147AF) 3 Units**  
**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.  
 Concurrent 36 hours lecture and 54 hours lab per term. This course includes instruction and lab experience in all phases of theatrical makeup. Old age, character, fantasy, look-alike, stylized, historical period styles, facial hair, corrective as well as non-human styles of makeup and their color and application theory are covered in detail. (Degree Credit) (CSU) (UC) (C-ID: THTR 174)
- THEA 176 F Beginning Playwright's Practicum 0.5-3 Units**  
**Prerequisite(s):** THEA 135 F with a grade of C or better  
 27-162 hours lab per term. This course involves the study and practical development on a beginning level, of new and experimental plays. Students enrolling in this course will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview is required for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)
- THEA 177 F Beginning Director's Practicum 0.5-3 Units**  
**Prerequisite(s):** THEA 225 F with a grade of C or better.  
 27-162 hours lab per term. This course is the beginning study of the laboratory exploration of student-directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning roles and technical positions. (CSU) (Degree Credit)
- THEA 178 F Beginning Musical Theatre Production 0.5-3 Units**  
 27-162 lab hours per term. This course involves the beginning study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)
- THEA 180 F Beginning Principles of Acting 3 Units**  
**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This course is an introduction to the theatre elements that relate directly to performing onstage, including rehearsal and performance techniques, stage movement, vocal techniques, stage terminology and script analysis. (Degree Credit) (CSU) (UC) (C-ID: THTR 151)
- THEA 181 F Intermediate Principles of Acting 3 Units**  
**Prerequisite(s):** THEA 180 F with a grade of C or better  
 Concurrent Corequisite: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F with a grade of C or better. 36 hours lecture and 54 hours lab per term. This course features an in-depth study of Intermediate Principles of Acting with emphasis on the applications of stylistic acting techniques for contemporary drama. Individual exercises and scene work based in Strasberg, Meisner, Uta Hagen, Viewpoints, Suzuki, and Adler acting techniques are explored. (Degree Credit) (CSU) (UC) (C-ID: THTR 152)
- THEA 182 F Advanced Principles of Acting I 3 Units**  
**Prerequisite(s):** THEA 181 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course is a continuation of Intermediate Principles of Acting with emphasis on the applications of stylistic techniques for the classics. Individual exercises and scene work in Greek/Roman, Elizabethan, Restoration, Farce, Commedia dell'arte through the exploration of the modern era Chekov, Ibsen, Strindberg and Shaw. (CSU) (UC) (Degree Credit)
- THEA 183 F Advanced Principles of Acting II 3 Units**  
**Prerequisite(s):** THEA 181 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course features in-depth study and practice of acting skills with increased emphasis on the application of the principles and theory of creative acting. Public performance of dramatic literature is required. (CSU) (UC) (Degree Credit)
- THEA 184 F Beginning Musical Theatre I (formerly THEA 125 F and THEA 186 F) 3 Units**  
**Prerequisite(s):** Audition required.  
 Corequisites: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better. 36 hours lecture and 72 hours lab per term. This course is an introductory exploration of beginning musical theatre techniques with an emphasis on contemporary musical theatre from 1864 to present day. Individual exercises in acting, movement and voice as related to contemporary musical theatre are explored. An audition or interview is required for the purposes of assigning solos and group performance roles. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- THEA 185 F Beginning Musical Theatre II (formerly THEA 138 F and THEA 187 F) 3 Units**  
**Prerequisite(s):** THEA 184 F with a grade of C or better  
 Concurrent Corequisites: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F. 36 hours lecture and 72 hours lab per term. This course is a continuation of Beginning Musical Theatre Techniques with emphasis on the applications of stylistic techniques for musical theatre ranging from 1895 to 1964. Individual exercises in acting, movement and voice as related to Early Broadway, Jazz Age, Golden Age, and Sondheim are explored. An audition or interview is required for the purposes of assigning solos and group performance roles. (CSU) (UC) (Degree Credit)
- THEA 188 F Introduction to Movement and Performance Techniques for Musical Theatre 1 Unit**  
**Prerequisite(s):** THEA 184 F with a grade of C or better  
 54 hours lab per term. This course offers an introductory performance experience focusing on styles of body movement as it relates to musical theatre stage productions. The fundamentals of musical theatre movement from 1865 to 1964 will be reviewed, including ballet, jazz and tap. Concepts of the history of movement as it relates to early musical theatre will also be explored. (CSU) (Degree Credit)
- THEA 189 F Beginning Movement and Performance Techniques for Musical Theatre 1 Unit**  
**Prerequisite(s):** THEA 188 F with a grade of C or better  
 54 hours lab per term. This course offers a beginning level performance experience focusing on styles of body movement as it relates to contemporary musical theatre stage productions from 1964 to present day. The fundamentals of musical theatre movement will be reviewed, including jazz, ballet, tap, lyrical, contemporary jazz, modern, and hip hop. Continued concepts of the history of contemporary musical theatre choreography as it relates to the musical stage will also be explored. (CSU) (Degree Credit)

- THEA 190 F Auditioning for Musical Theatre** 3 Units  
*Prerequisite(s)*: THEA 284 F with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This course offers an in-depth performance experience in the art of the musical theatre audition and callback. A weekly "Business of the Theatre" Lab includes headshot, resume, website, demo reel development and other topics related to branding and marketing oneself as a professional musical theatre performer. (CSU) (Degree Credit)
- THEA 191 F Beginning Musical Theatre Ensemble Voice** 1 Unit  
*Corequisite(s)*: THEA 184 F with a grade of C or better.  
 54 hours lab per term. This course offers a beginning level performance experience with an emphasis on the development of vocal and musicianship skills fundamental for traditional music theatre singing. Providing a study of basic vocal techniques, this course explores tone production, breath control, pronunciation, and choice of traditional music theatre song literature. (CSU) (Degree Credit)
- THEA 192 F Beginning Applied Private Voice Instruction for Musical Theatre** 1 Unit  
*Prerequisite(s)*: THEA 185 F and THEA 291 F, with a grade of C or better  
 Concurrent Corequisite: THEA 284 F with a grade of C or better. 18 hours lecture per term. This course offers a beginning performance experience in individual applied voice instruction and interpretation of musical theatre literature. (CSU) (Degree Credit)
- THEA 196HF Honors Creative Arts - Theatre** 3 Units  
 54 hours lecture and 18 hours lab per term. This Honors-enhanced course explores the nature of creativity through exposure to the performing arts, dance, literature and the fine arts. Students will make independent investigation into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students are required to attend museums, concerts, theatrical and dance performances. Students who receive credit in this course may not receive credit in MUS 196HF or ART 196HF. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- THEA 197 F Introduction to Stage Combat** 3 Units  
 36 hours lecture and 54 hours lab per term. This course focuses on learning how to safely and effectively perform moments of violence in the context of scene work from dramatic literature. Students will explore the fundamentals of unarmed and armed stage combat through analysis, practical application, and performance while improving kinesthetic awareness as well as enhancing confidence in heightened dramatic situations. (Degree Credit) (CSU) (UC)
- THEA 198 F Beginning Principles of Stage Combat** 3 Units  
*Prerequisite(s)*: THEA 197 F with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This course builds upon the fundamentals learned in THEA 197 F and focuses on applying previously-acquired skills, as well as integrating new ones, to new weapon styles in the context of scene work from dramatic literature. Students will expand upon armed analysis, practical application and performance while improving kinesthetic awareness and enhancing confidence in heightened dramatic situations. (Degree Credit) (CSU) (UC)
- THEA 200 F Intermediate Principles of Stage and Screen Combat** 3 Units  
*Prerequisite(s)*: THEA 197 F with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This course builds upon the fundamentals learned in THEA 197 F and focuses on applying previously-acquired skills, as well as integrating new ones, to new weapon styles in the context of scene work from dramatic literature. Students will expand upon armed analysis, practical application, and performance while improving kinesthetic awareness and enhancing confidence in heightened dramatic situations. (CSU) (UC) (Degree Credit)
- THEA 201 F Advanced Principles of Stage and Screen Combat** 2-3 Units  
*Prerequisite(s)*: THEA 200 F with a grade of C or better.  
 18 hours and 54-108 hours lab per term. This course builds upon the principles learned in THEA 200 F and focuses on applying previously-acquired skills, as well as integrating new ones, to new weapon styles in the context of scene work from dramatic literature, film, and television. Students will expand upon unarmed and armed analysis, practical application, and performance while improving kinesthetic awareness and enhancing confidence in heightened dramatic situations for the stage and screen. (CSU) (Degree Credit)
- THEA 222 F Acting for the Camera** 3 Units  
 36 hours lecture and 72 hours lab per term. This course encompasses the study and exercise in the special techniques of acting for the motion picture and television cameras. Emphasis will be placed on the audition process for commercials and TV/film technique along with the understanding of the various camera angles, shots, positions and actor behaviors unique to acting before a camera. (CSU) (UC) (Degree Credit)
- THEA 225 F Stage Directing** 3 Units  
*Prerequisite(s)*: THEA 180 F with a grade of C or better  
 Concurrent Corequisite: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F, with a grade of C or better. 36 hours lecture and 54 hours lab per term. This course is a study of the background and techniques of the director in theatre, with an emphasis on practical experience in directing through class projects. (CSU) (UC) (Degree Credit)
- THEA 233 F Intermediate Theatre Practicum** 1-2 Units  
*Prerequisite(s)*: THEA 134 F with a grade of C or better  
 54-108 hours lab per term. This course provides the intermediate study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances in the large proscenium theatre. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals, and performances. (CSU) (Degree Credit)
- THEA 234 F Intermediate Experimental Theatre** 2 Units  
 108 hours lab per term. This course involves the intermediate study and laboratory exploration of student directed one-act products culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)
- THEA 235 F Experimental Theatre** 2 Units  
*Prerequisite(s)*: THEA 135 F with a grade of C or better  
 108 hours lab per term. This course involves the study and laboratory exploration of student or faculty directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)

- THEA 239 F Intermediate Musical Theatre Concert Production** 1 Unit  
*Prerequisite(s):* THEA 139 F with a grade of C or better  
 54 hours lab per term. This course involves the intermediate study and exploration of all aspects of musical theatre concert production, culminating in a series of public and touring performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)
- THEA 244 F Intermediate Theatrical Lighting** 3 Units  
*Prerequisite(s):* THEA 170 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course involves the further study and execution of stage lighting with in-depth emphasis on equipment, control, color and their relationships to lighting design for the theatre. (CSU) (UC) (Degree Credit)
- THEA 246 F Intermediate Theatrical Costuming** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course develops intermediate skills in theatrical costuming including costume design for multiple venues and styles, historical research methods, costume construction, fabric identification and fabric modifications as it applies to the entertainment industry. (CSU) (UC) (Degree Credit)
- THEA 249 F Intermediate Stage Crew Activity** 0.5-3 Units  
*Prerequisite(s):* THEA 159 F with a grade of C or better  
 27-162 hours lab per term. This course covers intermediate practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (CSU) (UC) (C-ID: THTR 192)
- THEA 250 F Advanced Stage Crew Activity** 0.5-3 Units  
*Prerequisite(s):* THEA 249 F with a grade of C or better  
 27-162 hours lab per term. This course covers advanced practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (CSU) (UC) (C-ID: THTR 192)
- THEA 252 F Intermediate Theatre Crafts Lab** 1-2 Units  
*Prerequisite(s):* THEA 152 F with a grade of C or better  
 54-108 hours lab per term. This course is an intermediate experience in the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop intermediate skills in technical theatre. (CSU) (UC) (Degree Credit)
- THEA 253 F Advanced Theatre Crafts Lab** 1-2 Units  
*Prerequisite(s):* THEA 252 F with a grade of C or better  
 54-108 hours lab per term. This course provides advanced students experience in the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop advanced skills in technical theatre. (CSU) (UC) (Degree Credit)
- THEA 256 F 16-18th Century Theatrical Costume Construction** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the 16th through 18th centuries and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 257 F 19th Century Theatrical Costume Construction** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the nineteenth century and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 258 F 20th Century Theatrical Costume Construction** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the 20th century and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 259 F Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to historical periods before the 16th century and their application to present-day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 265 F Theatre Management** 2 Units  
 36 hours lecture per term. This course is designed to teach the business of show business in educational, community, and professional theater. Emphasis is placed on the contributions of the producer, production manager, and artistic director and the impact they have on theatre operations. This course is required of all students who are interested in management positions for the Theatre Arts Department productions. (CSU) (Degree Credit)
- THEA 266 F Stage Management** 3 Units  
 54 hours lecture per term. This course involves the study and the practical application of the practices of the Stage Manager as they pertain to the theatrical production process. Emphasis is placed on the duties, responsibilities and procedures from pre-production to post-production. This course is required of all students who are interested in stage management positions for the Theatre Arts Department productions. (CSU) (Degree Credit)
- THEA 276 F Intermediate Playwright's Practicum** 0.5-3 Units  
*Prerequisite(s):* THEA 176 F with a grade of C or better  
 27-162 hours lab per term. This course involves the study and practical development on an intermediate level, of new and experimental plays. Students enrolling in this course will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)
- THEA 277 F Intermediate Director's Practicum** 0.5-3 Units  
*Prerequisite(s):* THEA 177 F with a grade of C or better  
 27-162 hours lab per term. This course is an intermediate study of the laboratory exploration of student-directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

**THEA 278 F Intermediate Musical Theatre Production 0.5-3 Units**

**Prerequisite(s):** THEA 178 F with a grade of C or better  
27-162 lab hours per term. Additional hours for technical rehearsals, dress rehearsals and performances may be required. This course involves the intermediate study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

**THEA 279 F Advanced Musical Theatre Production 0.5-3 Units**

**Prerequisite(s):** THEA 278 F with a grade of C or better.  
27-162 hours lab per term. This course involves the advanced study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)

**THEA 280 F Advanced Director's Practicum 0.5-3 Units**

This course is an advanced study of the laboratory exploration of student directed one-act productions and D-Fest or Director's Festival culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

**THEA 284 F Intermediate Musical Theatre I (formerly THEA 226 F and THEA 286 F) 3 Units**

**Prerequisite(s):** THEA 185 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course features an in-depth study of Intermediate Musical Theatre Techniques with emphasis on the applications of the Pop/Rock genre of musical theatre performance. Individual exercises in acting, movement and voice as related to pop/rock in the 50's, 60's, 70's, and 80's. Contemporary Pop/Rock, Country, Bluegrass, and Hip Hop genres are explored. An audition or interview will be conducted for the purposes of assigning performance roles. (CSU) (UC) (Degree Credit)

**THEA 285 F Intermediate Musical Theatre II (formerly THEA 238 F and THEA 287 F) 3 Units**

**Prerequisite(s):** THEA 284 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is a continuation of Intermediate Musical Theatre Techniques with an emphasis on script and score analysis. Scene study as it relates to The Jazz Age, The Golden Age, Sondheim, Contemporary Musical Theatre, and Pop/Rock Musicals will be explored. An audition or interview will be conducted for the purpose of assigning solos and group performance roles. (CSU) (UC) (Degree Credit)

**THEA 290 F Theatrical Production Techniques 1-3 Units**

**Prerequisite(s):** THEA 130 F or THEA 131 F or THEA 143 F or THEA 146 F or THEA 151 F or THEA 157 F or THEA 162 F or THEA 172 F or THEA 189 F or THEA 233 F or THEA 235 F or THEA 244 F or THEA 246 F or THEA 250 F or THEA 253 F or THEA 276 F or THEA 277 F or THEA 278 F or THEA 285 F, with a grade of C or better.  
**Advisory:** Auditions or interviews will be conducted for the purposes of assigning performance roles and technical positions.  
54-162 hours lab per term. This course involves the practical application of theatrical production techniques through the assignment of performance, production and design, director or management positions. (CSU) (Degree Credit)

**THEA 291 F Intermediate Musical Theatre Ensemble Voice 1 Unit**

**Prerequisite(s):** THEA 191 F with a grade of C or better.  
**Corequisite(s):** THEA 185 F with a grade of C or better.  
Concurrent 54 hours lab per term. This course offers an intermediate level performance experience with an emphasis on the continued development of vocal and musicianship skills fundamental for contemporary musical theatre singing. Providing a continued study of basic vocal techniques, this course explores tone production, breath control, pronunciation, and choice of contemporary musical theatre song literature. (CSU) (Degree Credit)

**THEA 292 F Intermediate Applied Private Voice Instruction for Musical Theatre 1 Unit**

**Prerequisite(s):** THEA 284 F and THEA 291 F, with a grade of C or better.  
Concurrent Corequisite: THEA 285 F with a grade of C or better. This course offers an intermediate performance in individual applied voice instruction and interpretation of musical theatre literature. (CSU) (Degree Credit)

**THEA 298 F Theatre Arts Internship 2-4 Units**

**Advisory:** Completion of 10-12 units, with a grade of C or better, of any of the theatre courses listed in the technical theatre certificates  
18 lecture and 60-180 hours supervised unpaid internship or 75-255 hours paid internship per term. This course is designed to enable the Theatre Arts student to understand and demonstrate competence in a professional theatrical work environment through the combination of the application of extended classroom learning and the interaction of a professional theatrical supervisor. It is each student's responsibility to obtain their own internship opportunity. (CSU) (Degree Credit)

**THEA 299 F Theatre Arts Independent Study 1-3 Units**

54-162 hours independent study per term. This course is designed for self-directed students who wish to increase their knowledge and experience in theatre. The instructor and student create a learning contract and schedule of weekly conferences and projected completion dates. (CSU) (Degree Credit)

## Welding (WELD)

**WELD 091AF Industrial Welding Fundamentals 5 Units**

54 hours lecture and 108 hours lab per term. This course is designed to introduce the student to a variety of welding processes. Topics will include historical development of welding, the welding industry and its future, applied terms and definitions, methods of application, safety in the welding environment, welding positions, and joint types. Students will develop occupational proficiency using Oxyfuel Welding (OFW), Brazing (TB), Oxyfuel Cutting (OFC), Air Carbon Arc Cutting (CAC-A), and Plasma Cutting (PAC). (Degree Credit)

**WELD 091BF Semi-Automatic Welding Applications 5 Units**

**Corequisite(s):** WELD 091AF or WELD 100 F with a grade of C or better.  
54 hours lecture and 108 hours lab per term. This course will cover, with in-depth study, the make-up of constant voltage power sources and semi-automatic wire feed systems. Various methods of metal transfer will be covered, such as spray, globular, short-circuiting, and pulsed spray. Applications will be applied to ferrous and non-ferrous metals of various thicknesses in all axes. Students will become occupationally proficient using Gas Metal Arc Welding (GMAW) on limited thickness material in all axis on plate, Flux Cored Arc Welding (FCAW) on intermediate and unlimited thicknesses in all axis on plate. (Degree Credit)

**WELD 091CF Manual Arc Welding Fundamentals 5 Units****Corequisite(s):** WELD 091BF with a grade of C or better.

54 hours lecture and 108 hours lab per term. This course covers the make-up and use of constant current power supplies as found in Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) with alternating current, direct current and pulsed current output variations. Elements of welding design, cost estimations, process selection and related welding symbols also will be covered. Students will gain entry level skills on Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) using ferrous and non-ferrous metals. (Degree Credit)

**WELD 091DF Structural Welding Certification 5 Units****Corequisite(s):** WELD 091CF with a grade of C or better.

54 hours lecture and 108 hours lab per term. This course covers the origination and applications of welding codes, welding procedure qualification, welder qualification tests, weldment evaluation and quality control, visual inspection and preparation for Los Angeles City welding examination. Students will take written and lab tests to qualify as licensed certified welders in compliance with the American Welding Society (AWS) and the Los Angeles Building Code, using Shielded Metal Arc Welding (SMAW) and Flux Core Arc Welding (FCAW) on light gauge and heavy gauge structural steel. (Degree Credit)

**WELD 095 F Welding Skills Lab 0.5-2 Units****Advisory:** Enrollment in any Fullerton College welding course

Open Entry/Open Exit 27-108 hours lab per term. This course offers students the opportunity to further develop their welding skills. One-half unit of credit will be given for each twenty-four hours of class participation. Open entry, variable units. (Degree Credit)

**WELD 096 F Welding Inspection Technology 5 Units**

72 hours lecture and 54 hours lab per term. This course will aid in preparation for the American Welding Society's (AWS) Certified Welding Inspector's (CWI) exam. Fundamentals of visual welding inspection per nationally recognized code applications will be covered. Preparation and qualification of welding procedures and welder qualifications will be discussed. Building code compliance for welding applications will be assessed. Through the usage of weld gauge measurement tools and destructive and nondestructive testing equipment, the student will gain hands-on experience in welding inspection standards. This class is strongly recommended for those entering the fields of quality assurance, inspection, supervision and engineering of welded products. (Degree Credit)

**WELD 098 F Welding Fabrication Technology 2 Units****Prerequisite(s):** WELD 091AF or WELD 100 F, with a grade of C or better.

18 hours lecture and 54 hours lab per term. This course will provide the student with a general understanding of the fundamental methods of welding fabrication used in industry. Fabrication case studies and philosophies will be examined and the net outcome discussed. Students will become familiar with standard mill shapes and materials, jigs and fixtures, methods of layout and fitting, preparation and qualification of welding procedures and welding sequence, cost analysis, and cutting and fastening techniques. This course is strongly recommended for those entering the fields of metal fabrication, quality assurance, inspection, supervision, and engineering of welded products. (Degree Credit)

**WELD 100 F Introduction to Welding (formerly WELD 121AF) 3 Units**

36 hours lecture and 54 hours lab per term. This course emphasizes welding fundamentals and safety used in modern industry. Students in no-welding vocational and transfer areas will be able to gain welding skills needed as a support craft. Process identification, terms and definitions, safety guidelines, and practical applications are included. Students will gain entry level skills with Oxy-acetylene Welding (OAW), Brazing (TB) Shielded Metal Arc Welding (SMAW) and Oxy-acetylene Cutting (OFC). (CSU) (Degree Credit)

**WELD 120 F Gas Shielded Arc Welding 3 Units****Corequisite(s):** WELD 100 F with a grade of C or better.

18 hours lecture and 108 hours lab per term. This course enables students, who expect welding to be an integral part of their vocation, to master necessary manipulative skills in order to obtain job proficiency. Introduction to Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW) and Plasma Arc Cutting (PAC) are covered. Students will gain entry level skills on ferrous and non-ferrous metals using Gas Metal Arc and Gas Tungsten Arc Welding. (CSU) (Degree Credit)

## Wellness (WELL)

**WELL 110 F Pathology: The Massage Connection 3 Units**

54 hours lecture per term. This course is designed to meet the specific needs of massage therapy students and professionals interested in pathology. This course includes topics such as pain, inflammation and healing, and pathology associated with each of the systems. This class is part of the Physical Education's Therapeutic and Sports Massage: Massage Therapist Program. (CSU) (Degree Credit)

**WELL 221 F Personal Training Internship 2 Units**

**Prerequisite(s):** Completion of all courses in the Personal Trainer Certificate; ANAT 231 F, NUTR 210 F, PE 154 F, PE 235 F, WELL 040 F, WELL 119 F, and WELL 200 F with a grade of C or better. ANAT 231 F, NUTR 210 F, PE 154 F, PE 235 F, WELL 040 F, WELL 119 F, and WELL 200 F with a grade of C or better. 36 hours lecture, 36 hours lab per term. This course is designed to provide our Personal Training certificate students an opportunity to train clients (current FC students) under the supervision of our Physical Education faculty. The trainer gains practical hands-on experience working with clients. Course may be taken one time for credit. (CSU) (PE 199 F UC review required.) (Degree Credit)

**WELL 230 F The Body-Mind Connection 3 Units**

54 hours lecture per term. In this course, body-mind health refers to the integration of the mind (our thoughts, attitudes and emotions) and the body, and to their impact on our overall health and well-being. Body-mind health encompasses all aspects of our lives; physical, mental, emotional, and spiritual. (CSU) (Degree Credit) AA GE, CSU GE

**WELL 242 F Stress Management and Relaxation Training 2 Units**

27 hours lecture and 27 hours lab per term. In this course, the physiology of the stress response as well as specific physical changes, which indicate the onset of stress, will be covered. There will be discussion of the nature of various stressors, stress induced emotions as well as the role of thought process in the development and prevention of stress. Emphasis will be placed on the difference between "disputing" and "distracting" in managing stresses including the techniques used for each. Emphasis will also be placed on the analysis of stressful events and the application of the appropriate techniques. The place of diet and exercise will be covered as well as specific problem areas related to fitness such as back and neck care. Activity periods will cover flexibility and relaxation training, with instruction in the various relaxation techniques such as breathing, progressive relaxation, deep relaxation, Autogenesis and visualization. (CSU) (Degree Credit)

**WELL 265 F Movement Anatomy (formerly titled Kinesiology) 3 Units**

54 hours lecture per term. This course covers the musculoskeletal system and its function in human movement as well as movement in sports skills and activities of daily living and the muscles involved. This class will approach the human body primarily from a functional perspective. There will be emphasis on the relationship between the muscles and the bone as they relate to human movement. (CSU) (Degree Credit)

## Faculty

Greg Aviles  
 Lisa Bassi  
 Garrett Campbell  
 Yolanda Duron  
 Alix Plum

## Women's Studies (WMNS)

### WMNS 100 F Introduction to Women's Studies 3 Units

54 hours lecture per term. This course is an introduction to Women's and Gender Studies, an interdisciplinary field that examines gender as a social and cultural construction. This course is designed to provide a foundation for Women's Studies with an examination of gender socialization, feminist theory, and feminist themes. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### WMNS 100HF Honors Introduction to Women's Studies 3 Units

54 hours lecture per term. This Honors-enhanced course is an introduction to Women's and Gender Studies, an interdisciplinary field that examines gender as a social and cultural construction. This course is designed to provide a foundation for Women's Studies with an examination of gender socialization, feminist theory, and feminist themes. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

## Work Experience (WKEX)

### WKEX 191 F Work Experience and Internship - Vocational 2-4 Units

18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience and offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. Students may enroll multiple times by petition, up to a total of 16 units of credit. (CSU) (Degree Credit)

### WKEX 192 F Work Experience and Internship - General 2-4 Units

18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. Students may enroll multiple times by petition, up to a total of 16 units of credit. (CSU) (Degree Credit)

## Degrees and Certificates

Listed below are programs of study offered by Fullerton College and requirements for specific certificates and degrees. Students are encouraged to meet with an academic counselor for individual education planning.

- Certificates with less than a total of 18 units or not State approved, will not appear on college transcripts.
- Certificates with more than a total of 18 units will be noted on transcript as Certificate of Achievement.

Any request for a course substitution or waiver may be discussed with a counselor and must be submitted for approval to the Admissions and Records Office.

**NOTE: For students wanting to transfer to a university, see the "Transferability of Courses (p. 536)" section in this catalog and schedule an appointment with a counselor. Students may also reference [www.assist.org](http://www.assist.org) (<http://www.assist.org>). Degrees and certificate programs are listed below by Instructional Divisions.**

### #

- 3D Animation Skills Certificate - Level II (p. 238)

### A

- Accounting Associate in Science Degree (p. 205)
- Accounting Certificate (p. 205)
- Acting and Performance Level 1 Certificate (p. 472)
- Administration of Justice Associate in Science Degree (p. 211)
- Administration of Justice Associate in Science Degree for Transfer (p. 211)
- Advanced Bookkeeping Certificate (p. 206)
- Advanced Fashion Design Certificate (p. 340)
- Advanced Sheetfed Offset Presswork Certificate (p. 446)
- Advertising and Graphic Design Associate in Arts Degree (p. 227)
- Advertising and Graphic Design Certificate (p. 228)
- Africana Studies Associate in Arts Degree (p. 334)
- American Indian and Indigenous Studies Associate in Arts Degree (p. 334)
- Anthropology Associate in Arts Degree (p. 214)
- Anthropology Associate in Arts Degree for Transfer (p. 215)
- Architectural CAD Technology Certificate (p. 217)
- Architecture Associate in Science Degree (p. 217)
- Art (p. 218)
- Art Associate in Arts Degree (p. 228)
- Art History and Museum Studies Associate in Arts Degree (p. 230)
- Art History Associate in Arts Degree for Transfer (p. 230)
- Asian/Pacific Islander American Studies Associate in Arts Degree (p. 335)
- Assistant Costume Designer Certificate (p. 473)
- Astronomy Associate in Arts Degree (p. 319)
- Athletic Coach Certificate (p. 435)
- Automatic Transmission Specialist Certificate (p. 242)
- Automotive Chassis Specialist Certificate (p. 243)
- Automotive Engine Performance Specialist Certificate (p. 243)
- Automotive Fabrication Specialist Certificate (p. 243)
- Automotive Light Repair Specialist Certificate (p. 244)
- Automotive Maintenance Skills Certificate (p. 244)
- Automotive Management Certificate (p. 244)
- Automotive Manual Drive Train Specialist Certificate (p. 245)
- Automotive Service Advisor Certificate (p. 245)
- Automotive Technology Associate in Science Degree (p. 246)
- Automotive Technology Certificate (p. 247)
- Automotive: Emission Control Specialist Certificate (p. 247)

- Autonomous Systems Development Associate in Science Degree (p. 465)

**B**

- Biological Technician Associate in Science Degree (p. 250)
- Biology Associate in Arts Degree (p. 251)
- Biology Associate in Science Degree for Transfer (p. 251)
- Biotechnology Biomanufacturing Technician Certificate (p. 252)
- Biotechnology Lab Assistant Skills Certificate (p. 252)
- Biotechnology Laboratory Technician Certificate (p. 252)
- Business Administration Associate in Arts Degree (p. 257)
- Business Administration Associate in Science Degree for Transfer (p. 258)
- Business Data Analytics Certificate (p. 259)
- Business Management Associate in Science Degree (p. 259)
- Business Management Certificate (p. 260)
- Business Networking and Sales Certificate (p. 260)
- Business Skills Certificate (p. 261)

**C**

- Chemistry Associate in Arts Degree (p. 268)
- Chemistry Associate in Science Degree (p. 268)
- Chemistry Associate in Science Degree for Transfer (p. 268)
- Chicana and Latinx Studies Associate in Arts Degree (p. 336)
- Child and Adolescent Development Associate in Arts Degree for Transfer (p. 272)
- Child Development and Educational Studies Associate in Arts Degree (p. 273)
- Children's Book Illustration Certificate (p. 231)
- CNC Operator Certificate (p. 387)
- Commercial Interior Design Certificate (p. 377)
- Commercial Music Associate in Arts Degree (p. 412)
- Communication Studies Associate in Arts Degree for Transfer (p. 285)
- Communications: General Associate in Arts Degree (p. 280)
- Computer Animation/Multi Media Certificate (p. 238)
- Computer Game Design Certificate (p. 300)
- Computer Game Programming Skills Certificate (p. 300)
- Computer Graphics Certificate (p. 239)
- Computer Information Systems Associate in Science Degree (p. 292)
- Computer Information Systems Certificate (p. 292)
- Computer Numerical Control (CNC) Certificate (p. 388)
- Computer Science Associate in Science Degree (p. 301)
- Computer Technician Analyst Certificate (p. 293)
- Computer Technician Apprentice Skills Certificate (p. 294)
- Construction Estimating Skills Certificate (p. 303)
- Construction Inspection Associate in Science Degree (p. 304)
- Construction Inspection Certificate (p. 304)
- Construction Management Associate in Science Degree (p. 304)
- Construction Technology Associate in Science Degree (p. 305)
- Construction Technology Certificate (p. 305)
- Cosmetology Associate in Science Degree (p. 309)

- Cosmetology Certificate (p. 309)
- Cosmetology Instructor Associate in Science Degree (p. 309)
- Cost Accounting Certificate (p. 206)
- Costume Cutter/Draper Certificate (p. 474)
- Costume Stitcher Certificate (p. 475)
- Costume Wardrobe Certificate (p. 475)
- Counseling (p. 310)
- Crime Scene Investigation Certificate (p. 212)
- Cyber Security Analyst Certificate (p. 294)
- Cyber Security Associate in Science Degree (p. 294)
- Cyber Security Master Certificate (p. 295)
- Cyber Security Technician Certificate (p. 295)

**D**

- Dance Associate in Arts Degree (p. 316)
- Dance Teaching Certificate (p. 316)
- Digital Marketing Certificate (p. 261)
- Digital Publication Certificate (p. 239)
- Digital/In-Plant Graphics Certificate (p. 446)
- Dressmaking-Alterations Certificate (p. 341)
- Drone Journalism Certificate (p. 382)

**E**

- Early Childhood Education Administration Certificate (p. 273)
- Early Childhood Education Associate in Arts Degree (p. 274)
- Early Childhood Education Associate in Science Degree for Transfer (p. 274)
- Early Childhood Education Teacher Certificate (p. 275)
- Earth Science Associate in Science Degree (p. 320)
- Economics Associate in Arts Degree (p. 321)
- Economics Associate in Arts Degree for Transfer (p. 321)
- Electronic Imaging Certificate (p. 446)
- Elementary Teacher Education Associate in Arts Degree for Transfer (p. 276)
- Engineering Associate in Science Degree (p. 323)
- English Associate in Arts Degree (p. 328)
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- Entertainment Arts Certificate (p. 240)
- Entrepreneurship Associate in Science Degree (p. 262)
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**F**

- Fashion Design Associate in Arts Degree (p. 341)
- Fashion Design Certificate (p. 341)
- Fashion Illustration Certificate (p. 342)
- Fashion Journalism Associate in Arts Degree (p. 342)
- Fashion Merchandising Associate in Arts Degree (p. 343)
- Fashion Merchandising Certificate (p. 343)
- Fashion Skills Certificate (p. 343)



- Film, Television, and Electronic Media Associate in Science Degree for Transfer (p. 281)
- Finance Certificate (p. 263)
- Financial Accounting Certificate (p. 207)
- Flexography Skills Certificate (p. 447)
- Foreign Language Associate in Arts Degree (p. 348)

## G

- Geography Associate in Arts Degree (p. 350)
- Geography Associate in Arts Degree for Transfer (p. 351)
- Geology Associate in Science Degree (p. 354)
- Geology Associate in Science Degree for Transfer (p. 355)
- Greenhouse and Nursery Production Certificate (p. 363)

## H

- History Associate in Arts Degree (p. 358)
- History Associate in Arts Degree for Transfer (p. 359)
- Human Resources Management Certificate (p. 263)

## I

- Illustration Certificate (p. 231)
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- Industrial Drafting - Level I Certificate (p. 367)
- Industrial Drafting - Level II Certificate (p. 368)
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- Industrial Technology Associate in Science Degree (p. 369)
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- Interdisciplinary Studies: Emphasis in Arts and Human Expression Associate in Arts Degree (p. 369)
- Interdisciplinary Studies: Emphasis in Science and Mathematics Associate in Arts Degree (p. 371)
- Interdisciplinary Studies: Emphasis in Social Behavior and Self-Development Associate in Arts Degree (p. 373)
- Interdisciplinary Studies: Emphasis in Social Sciences Associate in Arts Degree (p. 374)
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- Interior Design Associate in Science Degree (p. 378)
- International Business Management Associate in Science Degree (p. 264)
- International Business Management Certificate (p. 264)
- International Business Skills Certificate (p. 265)

## J

- Journalism Associate in Arts Degree (p. 382)
- Journalism Associate in Arts Degree for Transfer (p. 382)
- Journalism Certificate (p. 383)

## K

- Kinesiology Associate in Arts Degree for Transfer (p. 436)

## L

- Landscape Design/Management Certificate (p. 363)
- Landscape Horticulture Certificate (p. 364)
- Landscape Irrigation Certificate (p. 364)
- Landscape Management Associate in Science Degree (p. 365)
- Latin-American Studies Associate in Arts Degree (p. 384)
- Law Enforcement Skills Development Skills Certificate (p. 212)
- Law, Public Policy and Society Associate in Arts Degree for Transfer (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/social-sciences/law-public-policy-and-society-associate-in-arts-degree-for-transfer/>)
- Lighting Technician Certificate (p. 476)

## M

- Machine Technology Level I Certificate (p. 389)
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- Marketing Management (p. 392)
- Marketing Management Associate in Science Degree (p. 393)
- Marketing Management Certificate (p. 394)
- Marketing Management Skills Certificate (p. 394)
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- Mathematics Associate in Science Degree (p. 400)
- Mathematics Associate in Science Degree for Transfer (p. 401)
- Medical Technology Associate in Arts Degree (p. 402)
- Metrology Certificate (p. 390)
- Metrology Mini Skills Certificate (p. 390)
- Microbiology Associate in Science Degree (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/microbiology/microbiology-associate-science-degree/>)
- Mobile Applications Entrepreneur Certificate (p. 265)
- Museum Assistant Certificate (p. 232)
- Music Associate in Arts Degree (p. 412)
- Music Associate in Arts Degree for Transfer (p. 413)
- Music Recording/Production Certificate (p. 414)
- Musical Theatre Level I Certificate (p. 476)

## N

- Networking Certificate (p. 295)
- Networking Skills Certificate (p. 296)
- Nursery Management Associate in Arts Degree (p. 365)
- Nutrition and Dietetics Associate in Science Degree for Transfer (p. 416)
- Nutrition and Foods Associate in Arts Degree (p. 416)
- Nutrition and Foods Skills Certificate (p. 417)

## O

- Office Applications Apprentice Certificate (p. 296)
- Office Applications Technician Certificate (p. 297)
- Ornamental Horticulture Associate in Science Degree (p. 365)
- Ornamental Horticulture Certificate (p. 366)

**P**

- Paralegal Studies Associate in Science Degree (p. 420)
- Paralegal Studies Certificate (p. 421)
- Patternmaker Certificate (p. 344)
- Payroll Accounting Certificate (p. 208)
- Personal Trainer Certificate (p. 437)
- Pest Management Certificate (p. 366)
- Philosophy Associate in Arts Degree (p. 423)
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- Photography Associate in Arts Degree (p. 426)
- Physical Education Associate in Arts Degree (p. 437)
- Physical Education – Fitness Associate in Science Degree (p. 438)
- Physics Associate in Science Degree for Transfer (p. 440)
- Piano Teaching Certificate (p. 414)
- Pilates Certificate (p. 438)
- Political Science Associate in Arts Degree (p. 442)
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- Pre-Nursing Associate in Arts Degree (p. 443)
- Printing Technology (General) Certificate (p. 447)
- Printing Technology Associate in Science Degree (p. 447)
- Product Development for Apparel Industries Certificate (p. 344)
- Professional Photography Certificate (p. 427)
- Programming Certificate (p. 297)
- Programming Skills Certificate (p. 298)
- Psychology Associate in Arts Degree (p. 451)
- Psychology Associate in Arts Degree for Transfer (p. 451)
- Public Relations Certificate (p. 383)

**Q**

- Quick Print/In-Plant Graphics Certificate (p. 448)

**R**

- Radio and Television/Video Production Certificate (p. 281)
- Radio Broadcast News Associate in Arts Degree (p. 282)
- Radio Broadcast News Certificate (p. 282)
- Radio Broadcasting Associate in Arts Degree (p. 282)
- Radio Broadcasting Certificate (p. 283)
- Radio Production Associate in Arts Degree (p. 283)
- Real Estate Management Associate in Science Degree (p. 454)
- Real Estate Management Certificate (p. 454)
- Real Estate Sales Certificate (p. 455)
- Real Estate Sales Skills Certificate (p. 455)
- Religious Studies Associate in Arts Degree (p. 424)
- Research Fundamentals Skills Certificate (p. 457)
- Residential Interior Design Certificate (p. 379)

**S**

- Scenic Artist Certificate (p. 477)
- Screen Printing Certificate (p. 448)
- Small Business Bookkeeping Certificate (p. 208)
- Social Justice Studies (p. 456)

- Social Justice Studies Associate in Arts Degree for Transfer (p. 456)
- Sociology Associate in Arts Degree (p. 460)
- Sociology Associate in Arts Degree for Transfer (p. 460)
- Sound Technician Certificate (p. 477)
- Spanish Associate in Arts Degree for Transfer (p. 462)
- Spanish Language Media Certificate (p. 384)
- Special Education Certificate (p. 277)
- Sports Broadcasting Certificate (p. 283)
- Stage and Screen Combat Level 1 Certificate (p. 478)
- Stage Management Certificate (p. 479)
- Studio Arts Associate in Arts Degree for Transfer (p. 232)
- Surfcam Skills Certificate (p. 390)
- Swiss Lathe Certificate (p. 391)

**T**

- Technical Theatre Certificate (p. 479)
- Television and Film Associate in Arts Degree (p. 284)
- Television and Film Production Certificate (p. 284)
- Textiles and Clothing Associate in Arts Degree (p. 345)
- The Business of Art Certificate (p. 266)
- Theatre Arts (Drama) Associate in Arts Degree (p. 480)
- Theatre Arts Associate in Arts Degree for Transfer (p. 481)
- Theme Park Technician Certificate (p. 482)
- Theme Park Technology Specialist Certificate (p. 483)

**V**

- Volunteer Services Skills Certificate (p. 458)

**W**

- Web Design Certificate (p. 298)
- Web Design Skills Certificate (p. 298)
- Welding Technology Certificate (p. 484)

**Y**

- Yoga Teacher Skills Certificate (p. 438)

## Accounting

**Division: Business and Computer Information Systems**

### Faculty

Stefan Ignatovski  
Paul St. John  
Ming-Yin Scott  
Brandon Tran  
Phat Truong

### Degrees and Certificates

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- Advanced Bookkeeping Certificate (p. 206)
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- Financial Accounting Certificate (p. 207)
- Individual Taxation Certificate (p. 207)
- Payroll Accounting Certificate (p. 208)
- Small Business Bookkeeping Certificate (p. 208)

## Courses

### **ACCT 001 F Accounting for Small Business 3 Units**

54 hours lecture per term. This course is ideal for the student who wishes to attain a solid foundation in the basic fundamentals of accounting. This includes business students who are planning more advanced studies of accounting and business at four-year institutions, as well as students who desire knowledge in accounting for small businesses, but do not necessarily intend to major in accounting or transfer to a four-year university. Topics include fundamentals of double entry journals; preparation of trial balances; worksheets and simple financial statements for service or retail types of businesses; use of controlling accounts; special journals; cash journals; accrual and cash basis accounting; cash controls and bank reconciliation; payroll accounting including employee earnings and deductions and employer's taxes and payments.

### **ACCT 100 F Small Business Accounting 3 Units**

54 hours lecture per term. This course teaches basic accounting as required for a small business. A semester-long practice case gives students the opportunity to input routine transactions and prepares monthly financials for a small business. Topics covered are sales, receivables, uncollectible accounts, payables, inventory, payroll, general ledger, depreciation, cash management, monthly bank reconciliations and financial statement reporting. Students learn how to compute payroll, prepare payroll checks and prepare federal and state payroll reports. Different forms of businesses are reviewed, with emphasis on bookkeeping for a sole proprietorship. (Degree Credit) (CSU)

### **ACCT 100AF Financial Accounting Principle 3 Units**

72 hours lecture per term. This course is the first part of a two-part financial accounting course that is equivalent to ACCT 101AF after the completion of ACCT 100AF and ACCT 100BF. This course covers the entire accounting cycle, cash, bank reconciliations, receivables, temporary investments, and incorporates a practical approach with the use of business papers and computer applications integrated into the homework. Not open to students who have completed ACCT 101AF with a grade of C or better. (Degree Credit) (CSU) (UC Credit Limitation)

### **ACCT 100BF Financial Accounting Principle 3 Units**

**Prerequisite(s):** ACCT/100A Financial Accounting Principles with a grade of "C" or better.

72 hours lecture per term. This course is a continuation of 100AF Financial Accounting Principles with emphasis on the basic concepts of accounting for plant assets, intangible assets, payroll, notes payable and other liabilities, partnerships and corporations, long term liabilities and investments in bonds, inventories, statement of cash flow, and analysis of financial statements. The practical approach is continued with the use of business papers and computer applications integrated into the homework. Upon completion of this course, the student will have fulfilled the equivalent of ACCT 101AF requirement. Not open to students who have completed ACCT 101AF with a grade of C or better. (Degree Credit) (CSU) (UC Credit Limitation)

### **ACCT 101AF Financial Accounting 5 Units**

90 hours lecture per term. This is a study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. This course covers the accounting information system, including recording and reporting business transactions with a focus on the accounting cycle, the application of generally-accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: ACCT 110)

### **ACCT 101BF Managerial Accounting 5 Units**

**Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.  
90 hours lecture per term. This course is the study of how managers use accounting information in decision making, planning, directing operations and controlling, and focuses on cost terms and concepts, cost behavior, cost structure and cost-volume profit analysis. Topics also include issues relating to cost systems, cost control, profit planning and performance analysis in manufacturing and service environments. (Degree Credit) (CSU) (UC) (C-ID: ACCT 120)

### **ACCT 102HF Honors Financial Accounting 5 Units**

90 hours lecture per term. This Honors-enhanced course is a study of the financial information system, examining why it is important and how it is used by investors, creditors and others to make decisions. This course covers the accounting information system, including recording and reporting business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Topics include issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: ACCT 110)

### **ACCT 104 F Computerized Accounting 2 Units**

**Prerequisite(s):** ACCT 100AF or ACCT 101AF, with a grade of C or better  
27 hours lecture and 27 hours lab per term. This course provides hands-on experience in accounting on a microcomputer. Systems included are the general ledger, accounts receivable and accounts payable, financial statements analysis, depreciation, inventory, and payroll. (Degree Credit) (CSU)

### **ACCT 107 F Computerized Accounting with QuickBooks 3 Units**

54 hours lecture per term. This course will introduce students to basic financial record keeping software using the double-entry system for recording transactions. Emphasis will be placed on how to use accounting application software in a small business environment. (Degree Credit) (CSU)

### **ACCT 110 F Payroll Accounting 3 Units**

54 hours lecture per term. This course is designed to provide an overview of social security, state and federal payroll taxes. The course is of a non-technical nature and is intended to give business students a practical working knowledge of the current tax laws and actual experience in applying the regulations. (Degree Credit) (CSU)

### **ACCT 112 F Income Tax Procedure 3 Units**

54 hours lecture per term. This course offers a simple and non-technical presentation of the information needed in preparing Federal Income Tax returns for individuals whose income is derived from wages and other various sources. Tax deductions and credits are also covered in detail. (Degree Credit) (CSU)

- ACCT 113 F Income Tax Procedure - Business** **3 Units**  
54 hours lecture per term. This course offers a basic and non-technical presentation of the information needed in preparing Federal Income Tax returns for corporations and partnerships. Tax deductions and credits are also covered in detail. (Degree Credit) (CSU)
- ACCT 201AF Intermediate Accounting** **5 Units**  
**Prerequisite(s):** ACCT 100BF or ACCT 101AF or ACCT 102 HF, with a grade of C or better.  
90 hours lecture per term. This second-year accounting course deals with adjustments, working papers, cash and receivables, inventories, plant and equipment, intangibles, deferred charges, liabilities, income tax allocation and accounting for premiums. This course is required of all vocational accounting majors. (Degree Credit) (CSU)
- ACCT 201BF Intermediate Accounting** **5 Units**  
**Prerequisite(s):** ACCT 100BF with a grade of "C" or better or ACCT 101AF with a grade of "C" or better or ACCT 102HF with a grade of "C" or better.  
90 hours lecture per term. This second-year accounting course deals with earnings per share, revenue recognition, accounting for pensions and other post-employment benefits, accounting changes and error corrections, cash flow statements, the impact of changing prices, and financial statement analysis. This course is required of all vocational Accounting majors. (Degree Credit) (CSU)
- ACCT 202 F Introduction to Cost Accounting** **3 Units**  
**Prerequisite(s):** ACCT 101BF with a grade of "C" or better  
54 hours lecture per term. This course covers the theory of cost accounting including job order costs, estimated costs, standard costs, miscellaneous costs, and distribution cost systems as applied to the control and management of business through cost accounting procedures. This course parallels cost accounting courses in four-year colleges. Required of all vocational accounting majors. (Degree Credit) (CSU)
- ACCT 203 F Auditing** **3 Units**  
**Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.  
54 hours lecture per term. This course emphasizes internal auditing with questions and separate cases. Incorporated into the course is one long case for application of auditing principles. (Degree Credit) (CSU)
- ACCT 204 F Analysis of Financial Statements** **3 Units**  
**Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.  
54 hours lecture per term. This course deals with characteristics of financial statements and financial statement analysis. A study of goals, methods, and tools for analysis is studied. In addition, accounts receivable, inventories, projected statements, cash budgets, and cash flow are studied. Emphasis is placed on financial analysis from a banking viewpoint. (Degree Credit) (CSU)
- ACCT 205 F Ethics in Accounting** **3 Units**  
**Prerequisite(s):** ACCT 101AF or ACCT 102HF, with a grade of C or better.  
This course examines the professional responsibility of ethical behavior in accounting and a study of truth in financial disclosures, ethical theory, code of conduct, auditing, managerial, and tax ethics. This course is now required in order to take the CPA Exam. (Degree Credit) (CSU)
- ACCT 210 F Advanced Accounting** **3 Units**  
**Prerequisite(s):** ACCT 201AF with a grade of "C" or better  
54 hours lecture per term. This course covers corporate reporting for segments: interim report, accounting for foreign operations, accounting for partnerships, accounting for government entities, not-for-profit entities, estates, and trusts. Also covered are bankruptcies, equity method, consolidated financial statements, and foreign currency transactions. (Degree Credit) (CSU)
- ACCT 220 F Individual Income Tax** **4 Units**  
72 hours lecture per term. This course is designed to study the federal income tax process, federal income tax laws that apply to individuals, and the application of tax principles to specific problems. Topics include gross income and exclusions, business deductions and itemized deductions, losses, certain tax credits and property transactions. A study is also made of California income tax laws in those areas which differ from federal tax law. This course is certified by the California Tax Education Council (CTEC) as fulfilling the 60-hour qualifying educational requirement imposed by the State of California for becoming a registered tax return preparer. (Degree Credit) (CSU)
- ACCT 221 F Corporate, Partnership, Estate and Trust Tax** **3 Units**  
54 hours lecture per term. This advanced course examines concepts of business income taxation. This course focuses on fundamental tax concepts, the mastery of which will enable students to incorporate tax factors into business and investment decisions. Content includes basic principles of income taxation as applied to partnerships, estates, and trusts; taxation on transfer of wealth, both during lifetime and testamentary. Computerized tax software used. (Degree Credit) (CSU)
- ACCT 222 F Corporate Taxation** **3 Units**  
**Prerequisite(s):** ACCT 220 F with a grade of C or better.  
54 hours lecture per term. This advanced course examines the concepts of corporate income taxation. This course focuses on fundamental tax concepts, the mastery of which will enable students to incorporate tax factors into business and investment decisions. Content includes basic principles of income taxation as applied to corporations and business entities elected to be taxed as S-Corporations. Computerized taxed software is used. (CSU)
- ACCT 230 F Excel for Accountants** **3 Units**  
**Advisory:** CIS 106 F.  
54 hours lecture per term. This course is specifically for accounting and finance professionals who have a good grasp of Excel and want to take their skills to the next level. Students will learn about the features they will need to achieve greater efficiency and automation. (Degree Credit) (CSU)
- ACCT 240 F Accounting Information Systems** **3 Units**  
**Prerequisite(s):** ACCT 101AF with a grade of "C" or better  
54 hours lecture per term. This course explores accounting information systems which applies accounting principles using general ledger and spreadsheet software. Designed to develop employable accounting analysis skills, evaluate and compare commercial software and analyze financial reporting. (Degree Credit) (CSU)
- ACCT 250 F Forensics Accounting** **3 Units**  
54 hours lecture per term. This course explores the fundamentals and techniques of investigative and forensics accounting. The development of forensic accounting as a discipline and its interaction with business, law, auditing and information systems will be explored. Subjects include financial statement and tax fraud, divorce and bankruptcy, identity theft and various white-collar crimes. Forensics principles necessary to detect, prevent and prosecute financial crimes will be explored. (Degree Credit) (CSU)
- ACCT 295 F Accounting Internship** **2-4 Units**  
18 hours lecture per term and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in accounting. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

# Accounting Associate in Science Degree

## Requirements

PROGRAM CODE: 2S03824

The Accounting Associate in Science Degree is designed to prepare students for employment in the fields of accounting and/or bookkeeping. This major is best suited for the student who wishes to pursue secure rewarding positions such as accounting manager, internal auditor, financial analyst, tax accountant, or controller in public accounting firms, corporations, governmental agencies, or not-for-profit organizations. A grade of C or better is required in each course taken. This degree requires 32-34 units.

Code	Title	Units
<b>Required Courses (27 units):</b>		
ACCT 101AF or ACCT 102HF	Financial Accounting Honors Financial Accounting	5
ACCT 101BF	Managerial Accounting	5
ACCT 107 F	Computerized Accounting with QuickBooks	3
ACCT 201AF	Intermediate Accounting	5
ACCT 201BF	Intermediate Accounting	5
ACCT 220 F	Individual Income Tax	4
<b>Restricted Electives (5-7 units):</b>		
ACCT 100 F	Small Business Accounting	3
ACCT 110 F	Payroll Accounting	3
ACCT 202 F	Introduction to Cost Accounting	3
ACCT 203 F	Auditing	3
ACCT 204 F	Analysis of Financial Statements	3
ACCT 205 F	Ethics in Accounting	3
ACCT 230 F	Excel for Accountants	3
BUS 111 F or BUS 211 F or BUS 211HF	Business Communications Critical Reasoning and Writing for Business (formerly Writing for Business) Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	3
BUS 240 F or BUS 240HF or BUS 245 F	Legal Environment of Business Honors Legal Environment of Business Business Law I (formerly BUS 241AF)	3
BUS 295 F	Business Internship (formerly BUS 061 F)	2-4
CIS 106 F	Beginning Spreadsheet (MS Excel)	3
CIS 205 F	Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)	3
<b>Total Units</b>		<b>32-34</b>

<sup>1</sup> See counselor for determination of correct course.

## Program Student Learning Outcomes

**Outcome 1:** Recognize revenues and expenses in the proper period as required in accrual basis accounting and Generally Accepted Accounting Principles (GAAP), and make adjustments to ledger accounts accordingly.

**Outcome 2:** Develop and use accounting information for daily recording of business financial transactions in a manufacturing environment, and develop and use operational budgets for a manufacturing company.

**Outcome 3:** Use the computer to input routine cash and credit transactions involving sales, purchases, expenses and employees into a computerized general ledger accounting software program.

**Outcome 4:** Prepare, comprehend, and analyze the basic accounting financial statements: Income Statement, Retained Earnings Statement, Balance Sheet, Statement of Cash Flows and the related notes to the financial statements.

## Accounting Certificate

### Requirements

PROGRAM CODE: 2C21255A

The **Accounting Certificate** is designed to prepare students for entry-level positions in accounting in public and private sector areas such as manufacturing, small business, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision making. Entry-level employment opportunities include positions in accounts receivable/payable, payroll, income tax preparation, cost accounting, and a number of trainee/internship positions. A grade of C or better is required in each course taken. This certificate requires 32-34 units.

Code	Title	Units
<b>Required Courses (27 units):</b>		
ACCT 101AF or ACCT 102HF	Financial Accounting Honors Financial Accounting	5
ACCT 101BF	Managerial Accounting	5
ACCT 107 F	Computerized Accounting with QuickBooks	3
ACCT 201AF	Intermediate Accounting	5
ACCT 201BF	Intermediate Accounting	5
ACCT 220 F	Individual Income Tax	4
<b>Restricted Electives (5-7 units):</b>		
ACCT 100 F	Small Business Accounting	3
ACCT 110 F	Payroll Accounting	3
ACCT 202 F	Introduction to Cost Accounting	3
ACCT 204 F	Analysis of Financial Statements	3
ACCT 205 F	Ethics in Accounting	3
ACCT 230 F	Excel for Accountants	3
BUS 111 F or BUS 211 F or BUS 211HF	Business Communications Critical Reasoning and Writing for Business (formerly Writing for Business) Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	3
BUS 240 F or BUS 240HF or BUS 245 F	Legal Environment of Business Honors Legal Environment of Business Business Law I (formerly BUS 241AF)	3
CIS 106 F	Beginning Spreadsheet (MS Excel)	3
CIS 205 F	Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)	3
<b>Total Units</b>		<b>32-34</b>

## Program Student Learning Outcomes

**Outcome 1:** Recognize revenues and expenses in the proper period as required in accrual basis accounting and Generally Accepted Accounting Principles (GAAP), and make adjustments to ledger accounts accordingly.

**Outcome 2:** Develop and use accounting information for daily recording of business financial transactions in a manufacturing environment, and develop and use operational budgets for a manufacturing company.

**Outcome 3:** Use the computer to input routine cash and credit transactions involving sales, purchases, expenses and employees into a computerized general ledger accounting software program.

**Outcome 4:** Prepare, comprehend, and analyze the basic accounting financial statements: Income Statement, Retained Earnings Statement, Balance Sheet, Statement of Cash Flows and the related notes to the financial statements.

## Advanced Bookkeeping Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40657

The **Advanced Bookkeeping Certificate** is designed to prepare students for a more advanced, full-charge bookkeeping position in the private sector areas such as small business, financial service, wholesale and retail business, manufacturing, or pursuing self-employment opportunities. After completing the program, you'll be prepared for entry-level employment opportunities in the accounting/bookkeeping fields. Accounting/bookkeeping employment opportunities include positions in accounts receivable, accounts payable, inventory control, as well as a variety of trainee/internship positions. A minimum grade of C is required in each course taken. This certificate requires 16 units.

Code	Title	Units
<b>Required Courses (16 units):</b>		
ACCT 101AF	Financial Accounting	5
ACCT 101BF	Managerial Accounting	5
ACCT 107 F	Computerized Accounting with QuickBooks	3
or ACCT 230 F	Excel for Accountants	
or CIS 106 F	Beginning Spreadsheet (MS Excel)	
BUS 111 F	Business Communications	3
or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Total Units</b>		<b>16</b>

## Program Student Learning Outcomes

**Outcome 1:** Prepare journal entries in accordance with Generally Accepted Accounting Principles (GAAP).

**Outcome 2:** Identify the accounting cycle steps, including the adjusting and closing processes.

**Outcome 3:** Prepare financial statements using either manual or computerized accounting books and records.

## Cost Accounting Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40664

The **Cost Accounting Certificate** is designed to prepare students for entry-level cost accounting positions in both public and private such as sector manufacturing and service businesses. Specialized training in cost accounting enables students to manufacturing a product or providing a service by looking at all expenses within the supply chain. It is done for the purpose of budget preparation and profitability analysis. The information derived from this process is useful to managers in determining which products, departments or services are most profitable and which ones need improvement. A minimum grade of C is required in each course taken. This certificate requires 16-19 units.

Code	Title	Units
<b>Required Courses (8 units):</b>		
ACCT 101BF	Managerial Accounting	5
ACCT 202 F	Introduction to Cost Accounting	3
<b>Restricted Electives (8-11 units):</b>		<b>8-11</b>
ACCT 205 F	Ethics in Accounting	3
ACCT 230 F	Excel for Accountants	3
ACCT 295 F	Accounting Internship	2-4
or BUS 295 F	Business Internship (formerly BUS 061 F)	
BUS 111 F	Business Communications	3
or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
<b>Total Units</b>		<b>16-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Determine the actual cost associated with manufacturing a product or providing a service by looking at all expenses within the supply chain.

**Outcome 2:** Determine both fixed and variable costs associated with a product line to determine the break-even point, and then ultimately the profit.

**Outcome 3:** Identify all methods of cost accounting such as the Standard Costing System, Activity-Based Costing, Throughput Accounting, and Cost-Volume-Profit Analysis.

**Outcome 4:** Prepare budget and analyze profitability. The information derived from this process is useful to managers in determining which products, departments or services are most profitable and which ones need improvement.

## Entry-Level Accounting Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40663

The **Entry-Level Accounting Certificate** is designed to prepare students for entry-level accounting positions in the private sector area such as small business, financial service, wholesale trades, and government. Specialized training enables students to maintain accounting records and develop financial reports in: 1) accounting, and 2) finance principles and practices. Entry-level employment opportunities include positions in accounts receivable/payable and a number of trainee/internship positions. A minimum grade of C is required in each course taken. This certificate requires 16-19 units.

Code	Title	Units
<b>Required Courses (8 units):</b>		
ACCT 101AF or ACCT 102HF	Financial Accounting Honors Financial Accounting	5
ACCT 107 F	Computerized Accounting with QuickBooks	3
ACCT 230 F	Excel for Accountants	3
<b>Restricted Electives (8-11 units):</b>		<b>8-11</b>
ACCT 100 F	Small Business Accounting	3
ACCT 101BF	Managerial Accounting	5
ACCT 204 F	Analysis of Financial Statements	3
ACCT 205 F or BUS 295 F	Ethics in Accounting Business Internship (formerly BUS 061 F)	3
BUS 111 F or BUS 211 F or BUS 211HF	Business Communications Critical Reasoning and Writing for Business (formerly Writing for Business) Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	3
<b>Total Units</b>		<b>19-22</b>

### Program Student Learning Outcomes

**Outcome 1:** Prepare accounting records in accordance to Generally Accepted Accounting Principles (GAAP).

## Financial Accounting Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40991

The **Financial Accounting Certificate** program emphasizes developing an advanced understanding of accounting principles, analytical skills and the capacity to solve problems. The objective of the program is to prepare students for a professional entry-level career within a focus area of accounting by building both technical and soft skills. Some career opportunities include accountant, bookkeeper, data-entry clerk, financial staff accountant, cost accountant, and general office clerk. A minimum grade of C is required in each course taken. This certificate requires 18 units.

Code	Title	Units
<b>Required Courses (15 units):</b>		
ACCT 101AF or ACCT 102HF	Financial Accounting Honors Financial Accounting	5
ACCT 201AF	Intermediate Accounting	5
ACCT 201BF	Intermediate Accounting	5
<b>Restricted Electives (3 units):</b>		<b>3</b>
ACCT 107 F	Computerized Accounting with QuickBooks	3
ACCT 110 F	Payroll Accounting	3
ACCT 203 F	Auditing	3
ACCT 204 F	Analysis of Financial Statements	3
ACCT 205 F	Ethics in Accounting	3
ACCT 230 F	Excel for Accountants	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Analyze and record accounting transactions.

**Outcome 2:** Analyze and record accounting adjustments in accordance with Generally Accepted Accounting Principles.

**Outcome 3:** Prepare, analyze and interpret basic financial statements.

## Individual Taxation Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40992

The **Individual Taxation Certificate** is designed for individuals interested in becoming a specialist in individual income tax preparation and become a "Certified Tax Preparer" in the state of California. This program includes everything you need to know to file both federal and California taxes for individuals and sole-proprietor businesses. The income tax course will not only fulfill the 60-hour requirement to become a Certified Tax Preparer, but it will also provide a strong foundation of knowledge in tax preparation. A minimum grade of C is required in each course taken. This certificate requires 17-20 units.

Code	Title	Units
<b>Required Courses (9 units):</b>		
ACCT 101AF or ACCT 102HF	Financial Accounting Honors Financial Accounting	5
ACCT 220 F	Individual Income Tax	4
<b>Restricted Electives (8-11 units):</b>		<b>8-11</b>
ACCT 204 F	Analysis of Financial Statements	3
ACCT 205 F	Ethics in Accounting	3
ACCT 221 F	Corporate, Partnership, Estate and Trust Tax	3
ACCT 230 F	Excel for Accountants	3
ACCT 250 F	Forensics Accounting	3
ACCT 295 F or BUS 295 F	Accounting Internship Business Internship (formerly BUS 061 F)	2-4
BUS 111 F	Business Communications	3

or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	

**Total Units** 17-20

## Program Student Learning Outcomes

**Outcome 1:** Prepare an individual tax return.

**Outcome 2:** Recommend tax-planning opportunities and advise appropriate tax-saving strategies.

## Payroll Accounting Certificate

**Division:** Business and Computer Information Systems

### Requirements

**PROGRAM CODE:** 2C40669

The **Payroll Accounting Certificate** is designed to prepare students for entry-level position in accounting in the public and private sector area such as manufacturing, small business, financial service, wholesale trades, and government. Specialized training in payroll accounting and financial accounting enables students to maintain accounting and payroll records. Entry-level employment opportunities include positions in payroll, accounts receivable/payable, and number of trainee/internship positions. A grade of C or better is required in each course taken. This certificate requires 16-19 units.

Code	Title	Units
<b>Required Courses (8 units):</b>		
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
ACCT 110 F	Payroll Accounting	3
<b>Restricted Electives (8-11 units):</b>		
ACCT 100 F	Small Business Accounting	3
ACCT 107 F	Computerized Accounting with QuickBooks	3
ACCT 203 F	Auditing	3
ACCT 230 F	Excel for Accountants	3
ACCT 295 F	Accounting Internship	2-4
or BUS 295 F	Business Internship (formerly BUS 061 F)	
BUS 111 F	Business Communications	3
or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
<b>Total Units</b>		<b>16-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Prepare journal entries in accordance to Generally Accepted Accounting Principles (GAAP).

**Outcome 2:** Interpret employment laws and employment tax laws.

**Outcome 3:** Prepare payroll records and payroll tax returns.

## Small Business Bookkeeping Certificate

**Division:** Business and Computer Information Systems

### Requirements

**PROGRAM CODE:** 2C40671

The **Small Business Bookkeeping Certificate** prepares students to (1) manage the accounting needs of a small business using Quickbooks accounting software, and (2) succeed in an entry-level bookkeeping position in the private sector areas such as a small business, financial service, wholesale or retail business or self-employment opportunities. Students are exposed to theoretical and practical knowledge on introductory financial accounting focusing on the key functional areas of accounting and prudent financial management. A grade of C or better is required in each course taken. This certificate requires 16-21 units.

Code	Title	Units
<b>Required Courses (9-11 units):</b>		
ACCT 100 F	Small Business Accounting	3-5
or ACCT 101AF	Financial Accounting	
or ACCT 102HF	Honors Financial Accounting	
ACCT 107 F	Computerized Accounting with QuickBooks	3
ACCT 230 F	Excel for Accountants	3
or CIS 106 F	Beginning Spreadsheet (MS Excel)	
<b>Restricted Electives (7-10 units):</b>		
ACCT 110 F	Payroll Accounting	3
ACCT 204 F	Analysis of Financial Statements	3
ACCT 205 F	Ethics in Accounting	3
ACCT 230 F	Excel for Accountants	3
ACCT 295 F	Accounting Internship	2-4
or BUS 295 F	Business Internship (formerly BUS 061 F)	
BUS 111 F	Business Communications	3
or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
BUS 151 F	Business Mathematics	3
BUS 180 F	Small Business Management	3
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
<b>Total Units</b>		<b>16-21</b>

## Program Student Learning Outcomes

**Outcome 1:** Prepare journal entries in accordance with Generally Accepted Accounting Principles (GAAP).



# Administration of Justice

Division: Technology and Engineering

## Faculty

Kelly Robertson

Kevin Sampson

## Degrees and Certificates

- Administration of Justice Associate in Science Degree (p. 211)
- Administration of Justice Associate in Science Degree for Transfer (p. 211)
- Crime Scene Investigation Certificate (p. 212)
- Law Enforcement Skills Development Skills Certificate (p. 212)

## Courses

### AJ 068 F Parolee Contacts 1.5 Units

Pass/No Pass option only. 27 hours lecture per term. This course is designed to improve the understanding of state prison parolees. This course covers a basic understanding of the California prison system, typical parolee behavior, communicating with parolees and understanding conditions of parole. It also emphasizes teaching the cognitive skills needed in law enforcement, including proper field interrogation. Investigative recourses within the Department of Corrections are discussed, as well as controlled interviews.

### AJ 069 F Health and Safety 11550 - Drug Influence 0.5 Units

Pass/No Pass only. 9 hours lecture per term. This course is designed to improve the police officer's ability to recognize the objective symptoms of drug intoxication, with emphasis placed on the proper application of California Health and Safety Code 11550. The course covers how the peace officer can develop techniques to better identify signs of specific drug ingestion, use proper drug testing methods and write effective reports to aid in successful prosecution.

### AJ 070 F Emergency Management 1.5 Units

Pass/No Pass only. 27 hours lecture per term. This course is designed to introduce important tactical concepts when planning for natural and technological disasters and other critical incidents that require law enforcement response. It focuses on basic emergency management principles, including disaster preparedness, mitigation, response and recovery. Emphasis is placed on the use of the Standardized Emergency Management (SEMS) and Law Enforcement Incident Command (ICS) Systems.

### AJ 071 F Preventing Racial Profiling 0.5 Units

Pass/No Pass only. 9 hours lecture per term. This course is designed to familiarize students with the conceptual and legal issues surrounding the unlawful practice of racial profiling. It examines critical cultural, legal and societal factors that ultimately lead to racial profiling as a discriminatory practice. The course emphasizes the need for the student to develop an understanding and respect for racial and cultural differences. Non-combative methods of carrying out law enforcement duties in a racially and culturally diverse environment are also emphasized.

### AJ 072 F Investigating Domestic Terrorism 1 Unit

Pass/No Pass only. 18 hours lecture per term. This course is designed to give the student essential background information about domestic terrorism and demonstrate how law enforcement personnel can properly investigate terrorist crimes. An analysis of the historical, legal and political perspective of terrorist activity as well as assessing philosophical and psychological typologies of terrorists. The curriculum emphasizes how law enforcement can develop investigative and intelligence capabilities to counter terrorist activity as a part of American national security policy. (Non-Degree Credit)

### AJ 075 F Cultural Diversity 1 Unit

Pass/No Pass only. 18 hours lecture per term. This course is designed to give students a perspective of public safety professionals and their relationship to major cultural, racial, and ethnic groups including persons with disabilities as well as gays and lesbians. This course will also examine law enforcement personnel issues that deal with gender, sexual harassment, diversity, affirmative action, and other contemporary challenges.

### AJ 077 F Organized Crime 1 Unit

Pass/No Pass only. 18 hours lecture per term. This course will analyze the effects of International Organized Crime Groups in the United States and the American law enforcement effort to combat those criminal organizations.

### AJ 078 F Multi-Agency Task Forces 0.5 Units

Pass/No Pass only. 9 hours lecture per term. This course will analyze the needs, benefits, and procedures in the establishment of federal, state, and local task forces. Emphasis will be placed on working together in a multi-agency environment and achieving desired outcomes.

### AJ 079 F Law Enforcement Career Preparation 0.5 Units

Pass/No Pass only. 9 hours lecture per term. This course will assist the student in identifying and utilizing effective performance strategies toward entry-level law enforcement employment examinations. Emphasis is placed on specific civil service testing procedures, including written exams, physical agility tests, oral board interviews, and the background investigation process.

### AJ 080 F Lifetime Fitness for Law Enforcement 2 Units

Pass/No Pass only. 36 hours lecture per term. This course is designed to introduce important wellness concepts to law enforcement personnel. Through the use of lecture, group discussion and practical demonstration, this course discusses how those in law enforcement can develop and maintain successful fitness habits and minimize job related stress. The course design emphasizes proper fitness assessment, effective anaerobic/aerobic fitness principles, the prevention of physical disablers through stress reduction, current nutrition guidelines and proper fitness program design. Intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers.

### AJ 084 F Domestic Violence 0.5 Units

Pass/No Pass only. 9 hours lecture per term. This course will demonstrate to the student that the intent of the Legislature in domestic violence cases is to stress enforcement of the laws to protect the victim and communicate the attitude that violent behavior is criminal behavior and will not be tolerated. The investigative process, arrest, court protective orders and victim assistance will be stressed.

- AJ 085 F Police Vehicle Pursuits** **2 Units**  
 Pass/No Pass only. 36 hours lecture per term. This examines police pursuits in California and the nation. Specific emphasis is placed on California laws, both criminal and civil, and violators involved in police pursuits will be covered. An analysis of officer and violator behavioral patterns both during and after police pursuits. This course will establish a better understanding of the dynamics and contemporary issues associated with high-speed police chases.
- AJ 089 F Child Abuse and Child Pornography** **0.5 Units**  
 Pass/No Pass only. 9 hours lecture per term. This course will prepare the student to identify, arrest and investigate child abuse and child pornography crimes.
- AJ 091 F Law Enforcement Instructor Development** **2 Units**  
 Pass/No Pass only. 36 hours lecture per term. This course is designed to assist both current and future law enforcement instructors to maximize their instructional skills and improve the learning process. This course will introduce law enforcement instructors to current adult learning techniques and developing instructional technology. This course is intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers.
- AJ 092 F Crime Scene Investigation** **1 Unit**  
 Pass/No Pass only. 9 hours lecture and 27 hours lab per term. This course will give students the knowledge and practical application to collect and preserve evidence at crime scene. Students will also learn the importance of physical evidence in solving crimes, evidence collecting and processing methods, as well as the use of forensic light source technology.
- AJ 093 F DNA Genetic Fingerprinting** **0.5 Units**  
 Pass/No Pass only. 9 hours lecture per term. This course will prepare the officer/student to properly handle DNA evidence collection and preservation. An understanding of the fundamentals of DNA and the current techniques of analysis will be presented.
- AJ 095 F Preventing Sexual Harassment** **0.5 Units**  
 Pass/No Pass only. 9 hours lecture per term. This course explores sexual harassment and gender discrimination and looks at ways to prevent this activity in the workplace. It defines basic types of sexual harassment and explains laws prohibiting harassing conduct. This course focuses on how affected personnel can effectively respond when experiencing harassment, and examines the role of management in combating harassing behavior through proper policy development and investigation.
- AJ 100 F Introduction to Criminal Justice (formerly Introduction to Law Enforcement)** **3 Units**  
 54 hours lecture per term. This course provides students with an introduction and overview of the American criminal justice system. This course examines the history, development and philosophy of criminal justice and summarizes fundamental practices found in law enforcement, the courts and corrections in a democratic society. Topics include the purpose of social control, theories of crime causation, the nature of police work, judicial procedures and correctional strategies in the United States. (Degree Credit) (CSU) (UC) (C-ID: AJ 100)
- AJ 110AF Criminal Law** **3 Units**  
 54 hours lecture per term. This course examines the basic principles, concepts and purposes of substantive criminal law. It surveys the historical development of penal law throughout history and examines basic criminal legal concepts, including culpability, defenses, parties to crime, inchoate offenses, and laws of arrest. This course emphasizes how law intersects operational police practices through the study of American constitutional law. (Degree Credit) (CSU) (UC) (C-ID: AJ 120)
- AJ 110BF Advanced Criminal Law** **3 Units**  
**Corequisite(s):** Completion of or concurrent enrollment in AJ 110AF with a grade of C or better.  
 54 hours lecture per term. This course is a study of the elements of crimes against persons, property, and the State as they are recognized in the Penal Code and general laws of California. Parties in crime, culpability, and incomplete offenses are presented from the point of view of the peace officer and the courts. This course may be taken together with or after AJ 110AF. (Degree Credit) (CSU) (UC Credit Limitation: AJ 110AF and AJ 110BF combined; maximum credit, one course)
- AJ 135 F Weaponless Defense** **1 Unit**  
 18 hours lecture and 18 hours lab per term. This course provides the student an opportunity to develop proficiency in weaponless defense techniques, controlling combative individuals, and handling passive, uncooperative, or armed-aggressive individuals. This course meets the one-unit physical education activity requirement for graduation. (Degree Credit) (CSU)
- AJ 140 F Juvenile Procedures** **3 Units**  
 54 hours lecture per term. This course is a study of juvenile crime, laws and social issues relating to youthful offenders. Other topics include examination of child abuse, domestic violence and gang membership, law enforcement responses to issues relating to juveniles, including the courts, probation and the California Youth Authority. (Degree Credit) (CSU) (C-ID: AJ 220)
- AJ 151 F Police Report Writing** **3 Units**  
 54 hours lecture per term. This course examines the proper writing of police crime reports and their importance in the successful prosecution of cases. Emphasis is placed on developing the student's ability to accurately take notes, employ appropriate methods of obtaining information from victims, witnesses, and suspects, formulate investigative techniques, and recognize proper report language. (CSU) (Degree Credit)
- AJ 220 F Criminal Procedure** **3 Units**  
 54 hours lecture per term. This course provides an examination and analysis of due process in criminal proceedings from pre-arrest through trial and appeal. This course describes stages of criminal justice process and reviews basic constitutional rights associated with the investigation and adjudication of criminal cases. Topics include laws of arrest, search and seizure, interrogations, criminal court function and post-trial remedies. (Degree Credit) (CSU) (C-ID: AJ 122)
- AJ 222 F Rules of Evidence** **3 Units**  
 54 hours lecture per term. This course covers the basic rules of evidence admissibility in criminal proceedings. This course explains legal principles regarding how criminal courts determine reliable, relevant and probative evidence. Discussion points include the origin, development, philosophy and constitutional basis of evidence, as well as the considerations affecting arrest, search and seizure. Emphasis is placed on developing the skills of law enforcement officer to effectively present courtroom evidence. (Degree Credit) (CSU) (C-ID: AJ 124)
- AJ 223 F Criminal Investigation** **3 Units**  
 54 hours lecture per term. This course examines the fundamentals of the criminal investigation process. This course is designed to acquaint the student with investigative theory, organization, and process necessary to aid in a successful criminal case clearance. Students explore basic responsibilities and techniques used to manage crime scenes, preserve evidence, interview witnesses, interrogate suspects, and accurately document case findings for trial preparation. Emphasis is placed on the investigation of specific crimes employing the case study method. (Degree Credit) (CSU) (C-ID: AJ 140)

**AJ 226 F Narcotics and Vice Control 3 Units**

54 hours lecture per term. This course will cover the various types of narcotics and their uses, with resultant law enforcement problems. This course will provide instruction regarding narcotics and vice enforcement, cures, and rehabilitation programs. (Degree Credit) (CSU)

**AJ 230 F Crime Scene Techniques 3 Units**

54 hours lecture per term. This course will introduce the student to field techniques for the collection and preservation of physical evidence at the scene of the crime. The course will cover physical and testimonial evidence, scene responsibilities, processing the scene, fingerprint evidence, trace evidence, blood and bodily fluids, impression evidence, firearms evidence, dangerous drugs and clandestine laboratories, sexual assaults, domestic abuse, elder abuse, burglaries and homicide crime scenes. (Degree Credit) (CSU) (C-ID: AJ 150)

**AJ 252 F Police Patrol 3 Units**

54 hours lecture per term. This course covers the fundamentals of proper patrol procedures and techniques, with particular emphasis on officer safety, public relations, and crime prevention. This course is designed to develop competency in handling frequently encountered police problems through the analysis of actual situations. This course will focus on developing officer survival skills through threat-based decision making. (Degree Credit) (CSU)

**AJ 276 F Investigation of Homicidal Behavior 3 Units**

54 hours lecture per term. This course is a historical perspective of homicide in America today. Topics include motives for murder, psychology of murder, criminal investigation into homicide, victims of murder, those who murder and various methods of murder. The course will also examine the phenomena of serial and mass murderers. (Degree Credit) (CSU)

**AJ 278 F Multicultural Issues within Administration of Justice 3 Units**

54 hours lecture per term. This course is a theoretical and conceptual overview of multicultural concepts and issues; an application of those concepts and issues to Administration of Justice; identification of problems related to our increasingly diverse population; examination of strategies to overcome those problems, particularly in relation to the maintenance of social order. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC)

**AJ 279 F Contemporary Issues in Law Enforcement 3 Units**

54 hours lecture per term. This course explores major legal, societal and organizational issues affecting the law enforcement profession. Topics include ethics, police use of force, high-speed vehicle pursuits, cultural awareness, workplace diversity, and community-oriented policing and problem solving. The course emphasizes the development of problem solving strategies as a way to effectively deal with the challenges that police face. (Degree Credit) (CSU)

## Administration of Justice Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03876

The **Administration of Justice Associate in Science Degree** is designed to provide the student with the knowledge and skills to meet the requirements necessary for employment in the field of law enforcement at the local, state and federal levels. Some of the occupations in the law enforcement field include Police Officer, Sheriff Officer, Detectives/Criminal Investigator, Correctional Officer, Private Detective/Investigator, Parole Officer, Probation officer, Juvenile Justice Counselor, and Pre-release

or Employer Counselor. This degree requires the completion of 24-25 units. At least one half of the units completed must be taken at Fullerton College.

Code	Title	Units
<b>Required Courses (9 units):</b>		
AJ 100 F	Introduction to Criminal Justice (formerly Introduction to Law Enforcement)	3
AJ 110AF	Criminal Law	3
AJ 151 F	Police Report Writing	3
<b>Restricted Electives (15-16 units):</b>		<b>15-16</b>
AJ 110BF	Advanced Criminal Law <sup>1</sup>	3
AJ 135 F	Weaponless Defense	1
AJ 140 F	Juvenile Procedures	3
AJ 220 F	Criminal Procedure	3
AJ 222 F	Rules of Evidence	3
AJ 223 F	Criminal Investigation	3
AJ 226 F	Narcotics and Vice Control	3
AJ 230 F	Crime Scene Techniques	3
AJ 252 F	Police Patrol	3
AJ 276 F	Investigation of Homicidal Behavior	3
AJ 278 F	Multicultural Issues within Administration of Justice	3
AJ 279 F	Contemporary Issues in Law Enforcement	3
<b>Total Units</b>		<b>24-25</b>

<sup>1</sup> Prerequisite required.

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of the laws, Constitutional requirements, and legally-defined procedures that criminal justice professionals have to adhere to when practicing within the field of criminal justice.

**Outcome 2:** Analyze contemporary issues in law enforcement and their impact on day-to-day operations of a law enforcement agency.

**Outcome 3:** Prepare and compose organized written reports that include proper fact patterns and appropriate administrative actions by law enforcement officers.

## Administration of Justice Associate in Science Degree for Transfer

### Requirements

PROGRAM CODE: 2S31527

The **Administration of Justice Associate in Science Degree for Transfer**, also called the Administration of Justice AS-T, is designed to prepare the student for transfer to a four-year institution of higher education and is specifically intended to satisfy lower-division requirements for the baccalaureate degree in criminal justice at a California State University. Ed Code Section 66746-66749 states students earning the Administration of Justice AS-T Degree will be granted priority for admission as a Criminal Justice major to a local CSU, as determined by the CSU campus to which the student applies. This degree is designed for students looking to further their understanding of the criminal justice system in America (law enforcement, courts, and corrections) and familiarize students with

academic, career and volunteer opportunities in the field. Courses in the degree emphasize writing development, critical thinking, and oral communication skills essential to today's criminal justice professional. This degree requires a total of 18-19 units

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (6 units):</b>		
AJ 100 F	Introduction to Criminal Justice (formerly Introduction to Law Enforcement)	3
AJ 110AF	Criminal Law	3
<b>List A - Select two of the following courses (6 units):</b>		
AJ 140 F	Juvenile Procedures	3
AJ 220 F	Criminal Procedure	3
AJ 222 F	Rules of Evidence	3
AJ 223 F	Criminal Investigation	3
AJ 230 F	Crime Scene Techniques	3
<b>List B: Select two of the following courses or any course not already used in List A (6-7 Units):</b>		
AJ 278 F	Multicultural Issues within Administration of Justice	3
PSY 101 F or PSY 101HF	General Psychology Honors General Psychology	3
SOC 101 F or SOC 101HF	Introduction to Sociology Honors Introduction to Sociology	3
MATH 120 F or MATH 120HF or PSY 161 F or PSY 161HF or SOSC 120 F	Introductory Probability and Statistics Honors Introductory Probability and Statistics Elementary Statistics for Behavioral Science Honors Elementary Statistics for Behavioral Science Introduction to Probability and Statistics	4
<b>Total Units</b>		<b>18-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of criminal law and the judicial process.

**Outcome 2:** Demonstrate an understanding of forensics and criminology.

# Crime Scene Investigation Certificate

Division: Technology and Engineering

## Requirements

PROGRAM CODE: 2C00054

The **Crime Scene Investigation Skills Certificate** is designed to prepare students for entry-level employment as a crime scene investigator or field evidence technician in the law enforcement field. This certificate requires a total of 16.5 units. A minimum grade of C is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (17 units):</b>		
AJ 092 F	Crime Scene Investigation	1
AJ 093 F	DNA Genetic Fingerprinting	0.5
AJ 151 F	Police Report Writing	3
AJ 222 F	Rules of Evidence	3
AJ 223 F	Criminal Investigation	3
AJ 230 F	Crime Scene Techniques	3
PHOT 111 F	Introduction to Photography from Analog to Digital	3
<b>Total Units</b>		<b>16.5</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate practical and theoretical crime scene investigation skills.

**Outcome 2:** Perform crime scene scenarios and gather evidence for criminal cases.

# Law Enforcement Skills Development Skills Certificate

## Requirements

PROGRAM CODE: 2C00057A

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **Law Enforcement Skills Development Skills Certificate** requires the completion of 17 units, of which 9.5 units are in required courses. An additional 7.5 units must be taken from the restricted electives listed below. This certificate is intended to meet the basic requirements of California Penal Code 13510 in raising the competence level of current and aspiring law enforcement personnel. A grade of C or better is required course taken, with the exception of AJ 079 F (CR/NC). At least one half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (9.5 units):</b>		
AJ 079 F	Law Enforcement Career Preparation	0.5
AJ 100 F	Introduction to Criminal Justice (formerly Introduction to Law Enforcement)	3
AJ 110AF	Criminal Law	3
AJ 151 F	Police Report Writing	3

<b>Restricted Electives (7.5 units):</b>		<b>7.5</b>
AJ 068 F	Parolee Contacts	1.5
AJ 069 F	Health and Safety 11550 - Drug Influence	0.5
AJ 070 F	Emergency Management	1.5
AJ 071 F	Preventing Racial Profiling	0.5
AJ 072 F	Investigating Domestic Terrorism	1
AJ 075 F	Cultural Diversity	1
AJ 077 F	Organized Crime	1
AJ 078 F	Multi-Agency Task Forces	0.5
AJ 080 F	Lifetime Fitness for Law Enforcement	2
AJ 084 F	Domestic Violence	0.5
AJ 085 F	Police Vehicle Pursuits	2
AJ 089 F	Child Abuse and Child Pornography	0.5
AJ 091 F	Law Enforcement Instructor Development	2
AJ 092 F	Crime Scene Investigation	1
AJ 093 F	DNA Genetic Fingerprinting	0.5
AJ 095 F	Preventing Sexual Harassment	0.5
AJ 096 F		0.5
<b>Total Units</b>		<b>17</b>

## Program Student Learning Outcomes

**Outcome 1:** Correctly identify four important responsibilities related to the peace officer function and devise personal action plans to effectively prepare for future law enforcement test or hiring inquiries.

**Outcome 2:** Discuss the history of law enforcement from the Anglo-Saxon period to the present and understand the organization of a typical police department according to modern concepts.

**Outcome 3:** Formulate basic legal theory using the principles of act, intent, concurrence and causation.

**Outcome 4:** Identify the use of police reports as well as the importance of taking thorough notes and record a series of events in chronological order.

## Anthropology

Division: Social Sciences

### Faculty

M. Leonor Cadena  
Karen Markley

### Degrees and Certificates

- Anthropology Associate in Arts Degree (p. 214)
- Anthropology Associate in Arts Degree for Transfer (p. 215)

## Courses

### ANTH 101 F Physical Anthropology 3 Units

54 hours lecture per term. This course is a study of the theories of human origin and evolutionary development using genetic, fossil evidence, plus a comparison of humankind anatomically and behaviorally with the higher primates. This field includes current research on the intellectual and cultural equality of the human races. At a number of California State universities and other four-year institutions, this course may be used for social sciences or biological science credit. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 110)

### ANTH 101HF Honors Physical Anthropology 3 Units

54 hours lecture per term. This Honors-enhanced course is a study of the theories of human origin and evolutionary development using genetic, fossil evidence, plus a comparison of humankind anatomically and behaviorally with the higher primates. This field includes current research on the intellectual and cultural equality of the human races. At a number of California State colleges and other four-year institutions, this course may be used for social sciences or biological science credit. This course will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments and a higher level of critical thinking. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 110)

### ANTH 101LF Physical Anthropology Lab 1 Unit

**Corequisite(s):** ANTH 101 F with a grade of C or better.

54 hours lab per term. This course provides an introduction to lab methods used in research in physical (biological) anthropology. Topics include the classification, biology, and behavior of living primates, human skeletal and physiological anatomy, human genetics, methods of phylogenetic reconstruction, and evidence for the evolutionary history of humans and other primates. Emphasis is on practical experience. Students will examine skeletal materials from living and extinct primates, participate in experiments to illustrate analytical techniques used in modern physical anthropology, and observe the behavior of living primates through field trip and/or audio visual resources. In addition to lab exercises, one short research paper will be required. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: ANTH 115L)

### ANTH 102 F Cultural Anthropology 3 Units

54 hours lecture per term. This course is an introduction to the cultural aspects of human behavior and the nature of culture. It includes the uniformities and variabilities of culture, social organization, family structure, economics, politics, religion, language, and other basic topics. This course fulfills the Multicultural Education Requirement for graduation. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 120)

### ANTH 102HF Honors Cultural Anthropology 3 Units

54 hours lecture per term. This Honors-enhanced course is an introduction to the cultural aspects of human behavior and the nature of culture. It includes the uniformities and variabilities of culture, social organization, family structure, religion, language, and other basic topics. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 120)

**ANTH 103 F Introduction to Archaeology 3 Units**

54 hours lecture per term. This course covers a specialized branch of anthropology that studies cultural and physical anthropological evolutionary development; archaeology uses scientific methods and theories to trace human ecology from the past to the present. Archaeologists deal with remains of past societies such as tools, shelter, remains of animals eaten for food, and other objects that have survived. These remains, termed artifacts, are used to reconstruct past behavior. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 150)

**ANTH 103HF Honors Introduction to Archaeology 3 Units**

54 hours lecture per term. This Honors-enhanced course focuses on anthropological archaeology, a specialized branch of anthropology that studies cultural and physical anthropological evolutionary development. Archaeology uses scientific methods and theories to trace human ecology from the past to the present. Archaeologists deal with remains of past societies such as tools, shelter, remains of animals eaten for food, and other objects that have survived. These remains, termed artifacts, are used to reconstruct past behavior. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 150)

**ANTH 105 F Language and Culture 3 Units**

54 hours lecture per term. This course covers the nature of language in relation to culture and how language processes develop and change. Students will examine how cultural knowledge is linguistically organized and how language shapes our perception of the world, and how it acts as a guide, both symbolic and practical, to understanding human actions. A basic introduction into the primary concepts of the discipline help students to understand what language reveals about human beings as bearers of culture. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ANTH 130)

**ANTH 107 F Anthropology of Magic, Witchcraft and Religion 3 Units**

54 hours lecture per term. This course is an anthropological survey of systems of magic, witchcraft, and religion from the past and the present, from societies around the world. It examines beliefs and practices in cultural settings with respect to the role of the supernatural. Special topics include myth, religious healing, witchcraft and sorcery, ritual and millenarian movements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 107HF Honors Anthropology of Magic, Witchcraft and Religion 3 Units**

54 hours lecture per term. This course is an anthropological survey of systems of magic, witchcraft, and religion from the past and the present, from societies around the world. It examines beliefs and practices in cultural settings with respect to the role of the supernatural. Special topics include myth, religious healing, witchcraft and sorcery, ritual and millenarian movements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 109 F Primate Behavior 3 Units**

54 hours lecture per term. This course covers a survey of primates from around the world, with in-depth examinations of their behavior, ecology, taxonomy and anatomy. Students will gain experience in the collection and analyzing of behavioral data. Current issues in primate conservation will also be explored. Specific primate species will be used as case studies to further enhance students' knowledge of prosimians, monkeys, and apes. (Degree Credit) (CSU) (UC)

**ANTH 199 F Anthropology Independent Study 1 Unit**

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of the Social Sciences through individual study and small group conferences. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC credit limitation depending upon course content; UC review required.)

**ANTH 209 F Cultures of Latin America 3 Units**

54 hours lecture per term. The scope of this course focuses on the exploration of the diverse cultures of ancient Latin America or Mesoamerica from the origins of civilization to the period of the Spanish conquest and some of the current issues indigenous people face in Latin America. The study of ancient Latin American cultures will be based on the four fields of anthropology. The study will be based on archaeological investigations, ethnographical research and various theoretical frameworks to enhance the understanding of the human experience in Latin America. The course will attempt to recreate the lifestyle, social structures, agricultural methods, religious practices and other various culture aspects of Meso-American civilizations in order to have a better understanding of the current conditions and aspects of the various diverse cultural groups from Latin America. The focus of this course will be on Mesoamerican civilizations as well as the Inca and other indigenous groups from South America. This course fulfills the Multicultural Education Requirement for graduation. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 211 F Celtic Cultures 3 Units**

54 hours lecture per term. This course will utilize data from archaeology, genetics, historical linguistics, Celtic myth, cultural anthropology, classic Greek and Roman texts to explore Celts of the past and present. The complex whole that encompasses Celtic society and culture over time and space will be studied including Celtic religion, myth and ritual, roles of females and males, art, warfare, ways of life, as well as current struggles for social, linguistic and political rights. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ANTH 215 F Global Issues in Anthropological Perspective 3 Units**

54 hours lecture per term. This course explores anthropological perspectives on issues of importance in an increasingly global society. Topics include culture contact, immigration, ethnic conflict, religion, global poverty, inequalities, trans-nationalism, neoliberalism, development and globalization. This course fulfills the Multicultural Education Requirement for graduation. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) CSU GE, IGETC

## Anthropology Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A03880

The **Anthropology Associate in Arts Degree** is designed to provide students with a holistic introduction to Anthropology. This degree will provide the background knowledge needed by undergraduate Anthropology majors for university transfer and coursework, while emphasizing the practical applications of anthropological skills and knowledge in a diversity of careers and the utility of anthropological perspectives as a lifelong learning tool for interpreting world events. This degree requires a total of 19-21 units.

Code	Title	Units
<b>Required Courses (10 units):</b>		
ANTH 101 F or ANTH 101HF	Physical Anthropology Honors Physical Anthropology	3
ANTH 101LF	Physical Anthropology Lab	1
ANTH 102 F or ANTH 102HF	Cultural Anthropology Honors Cultural Anthropology	3
ANTH 103 F or ANTH 103HF	Introduction to Archaeology Honors Introduction to Archaeology	3
<b>LIST A: Select one course (3 units):</b>		<b>3</b>
ANTH 105 F	Language and Culture	3
ANTH 107 F or ANTH 107HF	Anthropology of Magic, Witchcraft and Religion Honors Anthropology of Magic, Witchcraft and Religion	3
<b>LIST B: Select one to two courses, or any LIST A course not already selected (3-4 units):</b>		<b>3-4</b>
<i>Area 1: Science Methods</i>		
PSY 202 F or PSY 202HF	Research Methods in Psychology Honors Research Methods in Psychology	4
SOSC 125 F	Introduction to Research Methods	3
<i>Area 2: Sciences</i>		
ANAT 231 F	General Human Anatomy	4
ESC 100 F	Physical Geology	3
<i>and</i>		
ESC 100LF	Physical Geology Lab	1
ESC 101 F	Earth Science Survey	3
<i>and</i>		
ESC 101LF	Earth Science Survey Lab	1
ESC 190 F	Environmental Geology	3
GEOG 230 F	Introduction to Geographic Information Systems (formerly GEOG 281AF)	3
<b>LIST C: Select one to two courses or any LIST A or LIST B course not already selected (3-4 units):</b>		<b>3-4</b>
ANTH 109 F	Primate Behavior	3
ANTH 199 F	Anthropology Independent Study	1
ANTH 209 F	Cultures of Latin America	3
ANTH 211 F	Celtic Cultures	3
<b>Total Units</b>		<b>19-21</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and apply the key terminology, theories, theoretical orientations, methods and perspectives used in anthropology.

**Outcome 2:** Compare and contrast scientific knowledge with other ways of knowing, and be able to apply scientific knowledge to the study of humans.

**Outcome 3:** Identify and describe physical similarities and differences among and between; non-human primates, hominids, and modern homo sapiens using standard methodology.

**Outcome 4:** Apply cultural relativism to an analysis of globalization and its effects on the general characteristics of culture in the modern world.

## Anthropology Associate in Arts Degree for Transfer

### Requirements

**PROGRAM CODE:** 2A33680

The **Associate in Arts for Transfer Degree in Anthropology**, also called the Anthropology AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in anthropology. Ed Code Section 66746-66749 states students earning the Anthropology AA-T degree will be granted priority for admission as an Anthropology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC and 19-22 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. There are no additional graduation requirements. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

The Anthropology AA-T Degree is designed to provide students with a holistic introduction to Anthropology. This degree will provide the background knowledge needed by undergraduate Anthropology majors for university transfer and coursework, while emphasizing the practical applications of anthropological skills and knowledge in a diversity of careers and the utility of anthropological perspectives as a lifelong learning tool for interpreting world events. The Anthropology AA-T Degree requires 19-22 units, of which 9 units are in required "core" courses, and the remaining 9-14 units are chosen from restricted electives.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Core Courses</b>		
<b>Select 9 units from the following:</b>		
ANTH 101 F or ANTH 101HF	Physical Anthropology Honors Physical Anthropology	3
ANTH 102 F or ANTH 102HF	Cultural Anthropology Honors Cultural Anthropology	3
ANTH 103 F	Introduction to Archaeology	3
<b>List A</b>		

Select 4-5 units minimum from the following; any courses that are articulated as lower division major preparation for the Anthropology major at a CSU:

ANTH 101LF	Physical Anthropology Lab	1
<i>and</i>		
ANTH 105 F	Language and Culture	3-4
or ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	
or ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	
or ESC 100 F	Physical Geology	
or GEOG 160 F	Cultural Geography	
or MATH 120 F	Introductory Probability and Statistics	
or MATH 120HF	Honors Introductory Probability and Statistics	
or SOSC 120 F	Introduction to Probability and Statistics	

#### List B

Select 3-5 units from the following; Any courses not selected from List A: and/or any combination of coursework from List B (the courses do not have to be from two areas):

ANAT 231 F	General Human Anatomy	4
ESC 100 F	Physical Geology	4
& ESC 100LF	and Physical Geology Lab	
ESC 101 F	Earth Science Survey	4
& ESC 101LF	and Earth Science Survey Lab	
ESC 190 F	Environmental Geology	3
GEOG 230 F	Introduction to Geographic Information Systems (formerly GEOG 281AF)	3
PSY 202 F	Research Methods in Psychology	4
or PSY 202HF	Honors Research Methods in Psychology	

#### List C

Select 3-5 units from the following; any courses not selected from List A or B; and/or any Anthropology course; and/or any other non-Anthropology course from the Humanities or Social Sciences on cultural diversity:

ANTH 209 F	Cultures of Latin America	3
ANTH 211 F	Celtic Cultures	3
GEOG 100 F	Global Geography	3
or GEOG 100HF	Honors Global Geography	
PHIL 105 F	World Religions	3
PSY 131 F	Cross Cultural Psychology	3
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
SOC 290 F	Sociology of Race and Ethnicity	3

**Total Units** 19-24

## Program Student Learning Outcomes

**Outcome 1:** Identify and apply the key terminology, theories, theoretical orientations, methods and perspectives used in anthropology.

**Outcome 2:** Compare and contrast scientific knowledge with other ways of knowing, and be able to apply scientific knowledge to the study of humans.

**Outcome 3:** Apply cultural relativism to an analysis of globalization and its effects on the general characteristics of culture in the modern world.

## 4-5 Architecture

Division: Technology and Engineering

### Faculty

Alan Ray

### Degrees and Certificates

- Architectural CAD Technology Certificate (p. 217)
- Architecture Associate in Science Degree (p. 217)

### Courses

**ARCH 111 F Introduction to Architecture** 3 Units  
54 hours lecture per term. This course is designed for architecture majors as well as people interested in learning more about the architectural profession. The focus is split into two areas of emphasis. Architectural theory and history are explored from ancient civilizations to the present trends in design. The practical/business side of architecture is discussed; the topics include education requirements and job opportunities as well as the architect's perceived role in our society. (Degree Credit) (CSU) (UC)

**ARCH 113 F Architectural Drawing I** 3 Units  
36 hours lecture and 72 hours lab per term. This course is designed to develop graphic and visualization skills, and its link as a means of externalizing, evaluating and communicating ideas. It will include both freehand and mechanically constructed type of orthographic, axonometric, oblique and lineal perspective drawings on two-dimensional surfaces. It is intended to develop the use of instruments, lettering, line weights, graphics and presentation layout. The media to be used will include pencil, ink, colored pencil and markers. (Degree Credit) (CSU) (UC)

**ARCH 114 F Architectural Materials and Methods** 3 Units  
54 hours lecture per term. This course covers the various types of building materials used in construction and their applications in the formulation of specifications for building design. (Degree Credit) (CSU)

**ARCH 124 F Architectural CAD I** 3 Units  
36 hours lecture and 54 hours lab per term. This is a beginning course in using the CAD system for architectural applications. The course covers elementary principles associated with the various menu and command structures in computer-assisted drafting. Topics included are file management, layering, symbol libraries, orthographic projection, dimensioning, line types and the generation of text. (Degree Credit) (CSU)

**ARCH 125 F Design Studio I** 4 Units  
**Prerequisite(s):** ARCH 113 F with a grade of C or better.  
54 hours lecture and 54 hours lab per term. This course introduces the student to the formal and spatial language of architecture. Assignments will be explored in the form of lab projects. Such projects will be the analysis of case studies, and their integration in the design process. (Degree Credit) (CSU)

**ARCH 215 F Design Studio II** 4 Units  
**Prerequisite(s):** ARCH 125 F with a grade of C or better.  
54 hours lecture and 54 hours lab per term. This course is a continuation of Design Studio I to further enhance skills in the development of a personal theory of design. Students will extend their understanding in such areas as visualization, decision making, and evaluation. (Degree Credit) (CSU)



**ARCH 225 F Design Studio III** **4 Units**

**Prerequisite(s):** ARCH 215 F with a grade of C or better.  
54 hours lecture and 54 hours lab per term. This course is a continuation of Design Studio II to further enhance skills in understanding the organization of design and emphasis on the means of architecture. Site analysis and building orientation will be explored. Two- and three-dimensional drawings and model building will be produced. (Degree Credit) (CSU)

**ARCH 227 F Internship in Architecture** **2-4 Units**

18 hours lecture and 75-225 hours of supervised employment per term. This course is designed to provide learning opportunities through employment in an architectural firm or related type of business. No more than three units may be applied toward the degree or certificate. (Degree Credit) (CSU)

**ARCH 924 F Architectural CAD II** **3 Units**

**Advisory:** ARCH 124 F or industry work in related areas  
36 hours lecture and 54 hours lab per term. This is an intermediate course that utilizes the CAD system for architectural applications. The course incorporates principles associated with the various menu and command structures in computer-assisted drafting to develop solutions to 2D and 3D design problems. (CSU) (Degree Credit)

**ARCH 934 F Architectural CAD III** **3 Units**

**Advisory:** ARCH 924 F or industry work in related areas  
36 hours lecture and 54 hours lab per term. This is an advanced course utilizing the CAD system to produce a set of construction documents. This course deals with two-story residential construction as applicable to the present professional standards in terms of technical drafting and 2-D and 3-D computer drafting. (Degree Credit) (CSU)

## Architectural CAD Technology Certificate

### Requirements

**PROGRAM CODE:** 2C21253

The **Architectural CAD Technology Certificate** is designed to prepare students for employment in the architectural field. Students may seek employment as a CAD drafter, CAD technician, 3D BIM modeler or renderer in the fields of architecture, engineering, construction and interior design. This certificate requires a total of 23-28 units.

Code	Title	Units
<b>Required Courses (17-19 units):</b>		
ARCH 111 F	Introduction to Architecture	3
ARCH 114 F	Architectural Materials and Methods	3
ARCH 124 F	Architectural CAD I	3
ARCH 227 F	Internship in Architecture	2-4
ARCH 924 F	Architectural CAD II	3
ARCH 934 F	Architectural CAD III	3
<b>Restricted Electives (6-9 units):</b>		
COMM 135 F	Essentials of Argumentation	3
CSTR 031 F	International Building Code	3
CSTR 041 F	International Residential Code	3
<b>Total Units</b>		<b>23-28</b>

### Program Student Learning Outcomes

**Outcome 1:** Point out graphic principles/standards and conventions used in 2D/3D architectural design.

**Outcome 2:** Generate drawings using design tools and equipment of the profession.

## Architecture Associate in Science Degree

### Requirements

**PROGRAM CODE:** 2S03819

The **Architecture Associate in Science Degree** is designed to develop skills necessary to help facilitate transfer to a university for a Bachelor of Architecture Degree (B.Arch.). This degree contains drawing, design and computer drafting courses. Placement at the university is based on a portfolio review of work which demonstrates competence in key areas of architectural design. The curriculum is also designed to prepare students for employment in the architectural profession. This degree requires a minimum of 32-34 units.

Code	Title	Units
<b>Required Courses (32-34 units):</b>		
ARCH 111 F	Introduction to Architecture	3
ARCH 113 F	Architectural Drawing I	3
ARCH 114 F	Architectural Materials and Methods	3
ARCH 124 F	Architectural CAD I	3
ARCH 125 F	Design Studio I	4
ARCH 215 F	Design Studio II	4
ARCH 225 F	Design Studio III	4
ARCH 227 F	Internship in Architecture	2-4
ARCH 924 F	Architectural CAD II	3
ARCH 934 F	Architectural CAD III	3
<b>Total Units</b>		<b>32-34</b>

### Program Student Learning Outcomes

**Outcome 1:** Develop CAD structural drawings of all types and use them to solve construction problems as an intern.

**Outcome 2:** Define various design concepts commensurate with entry-level university architecture courses as a transfer student.

# Art

Division: Fine Arts

## Faculty

Deborah Davidson  
 Megan Debin  
 Phil Dimitriadis  
 James Dowdalls  
 Carla Falb  
 Carol Henke  
 William Henke  
 Stephen Klippenstein  
 Kristin Mihaylovich  
 Jaime Perez  
 Daniel Pope  
 Michael Sheehan  
 Todd Smith  
 Carl Stanaway  
 Vonn Sumner  
 Michele Van Ry

## Degrees and Certificates

- Advertising and Graphic Design Associate in Arts Degree (p. 227)
- Advertising and Graphic Design Certificate (p. 228)
- Art Associate in Arts Degree (p. 228)
- Art History and Museum Studies Associate in Arts Degree (p. 230)
- Art History Associate in Arts Degree for Transfer (p. 230)
- Children's Book Illustration Certificate (p. 231)
- Illustration Certificate (p. 231)
- Museum Assistant Certificate (p. 232)
- Studio Arts Associate in Arts Degree for Transfer (p. 232)

## Courses

### ART 090 F Advanced Topics in Art 3 Units

**Advisory:** 3-6 units of commercially related art or computer graphics courses, or professional equivalent

18-54 hours lecture and 18-162 hours lab per term. This course is designed to address new and emerging topics and trends and technology in Commercial Art and Design, as well as to provide personal growth to students in a variety of Art and computer graphics lab courses. This course will be offered in modules of advanced topics. Unit credit may range from 1 to 3 units per module. Consult the class schedule to verify topic areas and credit offered for each topic.

### ART 100 F Fundamentals of Art 3 Units

54 hours lecture per term. This introductory course investigates the visual elements and principles of art through lectures, reading, films and hands-on experience. It also examines, in the same manner, historical styles and themes in art as well as materials and techniques. Pass/No Pass/Letter Grade option. (Degree Credit) (CSU) AA GE, IGETC

### ART 110 F Introduction to Art 3 Units

54 hours lecture per term. This course provides an introduction to art from prehistoric times to the present. Classroom presentations are supplemented by gallery and museum visits. While examining the role that the visual arts have played in the development of the cultures of the world, the student is exposed to a wide variety of artistic media. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ARTH 100)

### ART 112 F Art History - Ancient to Medieval 3 Units

Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course is a study of Western art, including architecture, sculpture and painting from Prehistory through the Middle Ages. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ART 110)

### ART 113 F Art History - Renaissance to Modern 3 Units

Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course is a survey of architecture, sculpture and painting from the Renaissance through the century. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ARTH 120)

### ART 113HF Honors Art History - Renaissance to Modern 3 Units

54 hours lecture per term. This Honors-enhanced course is a survey of architecture, sculpture and painting from the Renaissance through the 20th century. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### ART 114 F Art History - Impressionism to Present 3 Units

54 hours lecture per term. This course is a survey of the development of modern architecture, sculpture and painting from their origins in the 19th century to the present. Art History courses are open to all students and course may be taken in any sequence; at least two semesters are required for art history majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### ART 115 F The Museum Experience (formerly Museum Survey) 3 Units

**Advisory:** ART 110 F or completion of any art history course.

54 hours lecture per term. This is a basic course in the study of museums and their collections. The course includes on-site lectures pertaining to the function of museums, the history of the art collections, the analysis and interpretation of the art in each collection and exhibition design. (Degree Credit) (CSU) AA GE

### ART 116 F Art History - The Art of Mexico 3 Units

Pass/No Pass/Letter Grade Option. 54 hours lecture per term. This course is a survey of the visual arts of Mexico from the earliest civilizations to contemporary Mexican and Chicano art. Both traditional and popular art forms are studied in the context of the cultures that produced them. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### ART 117 F Art History - American Art 3 Units

54 hours lecture per term. This course is a survey of American art and architecture from the 17th century to the present. Lectures will present an overview of painting, sculpture, photography, and architecture from Colonial beginnings through recent Post-Modern developments. Emphasis will be placed on discovering what is American in American art. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### ART 118 F Color Theory 3 Units

36 hours lecture and 72 hours lab per term. This course is an introduction to fundamentals of color theory through lecture and applied exercises in paint and collage. Includes discussion of cultural differences in color symbolism and the historical development of conceptual models of color usage in both science and art. Theoretical focus will be on the 12 color system of color organization with emphasis on the color theories of Itten and Albers. The lab exercises focus on practical applications of color theory in the visual arts professions. The course concludes with an introduction to digital color as used in computer graphics. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 270)

- ART 120 F Basic Design** **3 Units**  
36 hours lecture and 72 hours lab per term. This is an introduction to strategies and techniques for the crafting, selecting and arranging visual elements in order to create artwork that engages the viewer. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 100)
- ART 121 F Three-Dimensional Design** **3 Units**  
*Advisory:* ART 120 F  
36 hours lecture and 72 hours lab per term. This course is an introduction to three-dimensional design. This course defines the contrast of three-dimensional form to the two-dimensional format. The focus is on composition of a 360 degree form, in materials selected to best depict this contrast. This course involves the use of hand tools and some power equipment. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 101)
- ART 122 F Museum Studies - Introduction to Gallery Practices** **3 Units**  
36 hours lecture and 72 hours lab per term. This course provides an introduction to gallery practices through hands-on practice in installing art exhibitions in the Fullerton College Art Gallery. This course includes an introduction to the basic skills of installing art exhibitions and includes field trips to museums and galleries. Recommended for Art majors. (Degree Credit) (CSU)
- ART 123 F Business Practices in Art** **3 Units**  
54 hours lecture per term. This course examines the basic business and professional practices needed to begin or continue a career in the visual arts. The class will require portfolio presentation, creation of resume and self-promotional pieces in addition to an understanding of proposals, contracts, and personal business practices. Also, a personal business notebook is to be kept by the students for future use. (Degree Credit) (CSU)
- ART 124 F Museum Studies - Exhibition Production** **3 Units**  
*Prerequisite(s):* ART 122 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course provides increasing responsibility in exhibition planning, research, operation and management. This course introduces the creation of educational materials for the gallery visitor and the organizational structure of museums and includes field trips to museums and galleries. This course is recommended for Art majors. (CSU)
- ART 125 F Museum Studies - Exhibition Design and Careers** **3 Units**  
*Prerequisite(s):* ART 124 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course provides an introduction to exhibition design and museum careers. This course provides an opportunity to build gallery practice skills, and develop a deeper understanding of exhibition planning, research, operation and management of the Fullerton College Art Gallery. Museum careers will also be explored. This course is recommended for Art majors. (Degree Credit) (CSU)
- ART 127 F Beginning Floral Painting (formerly Applied Painting - Floral)** **2 Units**  
*Prerequisite(s):* ART 188 F or ART 189 F, with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course emphasizes realism as it applies to form, value and color. Students will learn the fundamentals of color harmony and structure; work is from nature, still life and photography in various painting media. (Degree Credit) (CSU) (UC)
- ART 128 F Portrait Painting** **2 Units**  
*Advisory:* ART 129 F or ART 186 F and ART 189 F.  
18 hours lecture and 54 hours lab per term. This course will offer the student the opportunity to develop portraiture through schematic studies and observational methods using models and plaster busts. Representational observation of facial features and varied facial types and expressions will be developed into portrait painting. Costume, setting, color harmony and historical and contemporary portraiture concepts to be studied. (Degree Credit) (CSU) (UC)
- ART 129 F Portrait Drawing** **2 Units**  
*Advisory:* ART 182 F and ART 186 F  
18 hours lecture and 54 hours lab per term. This is a basic course in portrait drawing based upon the study of the human head. Facial structure and the representation of many types of people in various art media are explored. (Degree Credit) (CSU) (UC)
- ART 130 F Intermediate Portrait Drawing** **2 Units**  
*Prerequisite(s):* ART 129 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course covers the advanced study of portrait drawing through schematic studies and observational methods using models and plaster busts. Costume, setting, historical and contemporary portraiture concepts will be studied. Observation of facial features and varied facial types and expressions will be developed. (CSU) (UC)
- ART 131 F Introduction to Printmaking** **3 Units**  
*Advisory:* ART 120 F or ART 182 F  
36 hours lecture and 72 hours lab per term. This course provides experience with materials and processes involved in non-toxic approaches to relief, intaglio, screen-print and lithography, including the exploration of digital print processes. Designed to encourage graphic creativity and professional skill in the development of plates and their printing augmented by an awareness of traditional and contemporary methods and styles. (Degree Credit) (CSU) (UC) (C-ID: ARTS 220)
- ART 132 F Intermediate Printmaking** **3 Units**  
*Prerequisite(s):* ART 131 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course provides students with an opportunity to build skills and expand the knowledge and experience with materials and processes of a variety of printmaking procedures that was initiated in the first semester of Printmaking. Emphasis and concentration is on creating an edition of prints. (Degree Credit) (CSU)
- ART 137 F Basic Drawing for Entertainment Arts** **3 Units**  
36 hours lecture and 72 hours lab per term. This course is an introduction to the fundamentals of representational drawing focusing on entertainment art preparation. Media used may include pencil, colored pencil, markers, watercolor, and mixed media. This course has class field trips dedicated for out-of-class sketchbook requirements emphasizing drawing from life by observing people, plants and architecture. This course is designed for art majors who have an interest in pursuing illustration and entertainment art courses. (Degree Credit) (CSU)
- ART 138 F History of Graphic Design** **3 Units**  
*Advisory:* ART 140 F or DART 100 F.  
36 hours lecture and 54 hours lab per term. This course explores the history of graphic design from the 19th century to present day. In addition to studying historical design trends, students will also produce design projects based on specific vintage styles. This course is taught in the computer lab and utilizes the Adobe Creative Suite of software. \$15 materials fee payable at registration. (Degree Credit) (CSU)

**ART 139 F Fashion Sketching****2 Units**

18 hours lecture and 54 hours lab per term. This course is designed for the student interested in a fashion career or the graphic design or illustration major wanting to develop fashion sketching skills. The course will include refinement of basic skills in drawing of the clothed figure as well as rendering of fabrics and patterns. Media used includes graphite, ink, marking pens, charcoal, colored pencils, photocopy, and mixed media. Development of a personal sketching style will be encouraged. (Degree Credit) (CSU)

**ART 140 F Graphic Design I (formerly Introduction to Advertising and Graphic Design)****3 Units**

36 hours lecture and 54 hours lab per term. This course emphasizes communication through use of concepts, type and images. Topics include development of layout and computer skills, style and an introduction to logotype design. \$15 materials fee payable at registration. (Degree Credit) (CSU)

**ART 141 F Typography****3 Units****Advisory:** ART 140 F

36 hours lecture and 54 hours lab per term. This course focuses on the use of type and typography in print and digital graphic design and prepares students to meet industry standards in the design and advertising industries. (Degree Credit) (CSU)

**ART 142 F User Experience - UX Design****3 Units****Advisory:** ART 140 F or DART 100 F or DART 102 F.

36 hours lecture and 54 hours lab per term. This course develop skills in user experience and interface design process including selecting interfaces that are meaningful to users and relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. \$15 materials fee required at time of registration. (Degree Credit) (CSU)

**ART 143 F Basic Drawing for Entertainment Arts - Drawing from the Imagination****3 Units****Prerequisite(s):** ART 137 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course applies the fundamentals of representational drawing and form, focusing on drawing and designing from the imagination, to complete industry level assignments. This course is designed for art majors who have an interest in pursuing careers in animation and entertainment art design. (Degree Credit) (CSU)

**ART 144 F Fundamentals of Cartooning****2 Units****Advisory:** ART 182 F or ART 179 F

This course is an introduction to basic cartooning techniques and includes sketching, inking, and the development of characters. Projects include gag line cartooning, political cartooning, and the development of a weekly cartoon strip. In addition, there will be an analysis of the elements of both the humorous and the dramatic in cartoon art. This analysis will include a review of historically significant Sunday funnies and comic book characters, as well as an examination of major trends in comic art from 1895 to the present. (Degree Credit) (CSU)

**ART 145 F Publication Design****3 Units****Advisory:** ART 140 F and DART 100 F

36 hours lecture and 54 hours lab per term. This is an advanced course with emphasis on the design of publications such as brochures and magazine layouts to simulate real world assignments. Finished comprehensive projects will be created on the computer to a professional quality suitable for inclusion in a student's portfolio. \$15 materials fee due at registration. (Degree Credit) (CSU)

**ART 146 F Advertising Design****3 Units****Advisory:** ART 140 F and DART 100 F

This is an advanced level course with emphasis on design for advertising. The assignments are intended to simulate real world experience and may include advertising campaigns, posters, and billboards. Finished comprehensive projects will be created on the computer to a professional quality suitable for inclusion in a student's portfolio. \$15 materials fee is required at time of registration. (Degree Credit) (CSU)

**ART 147 F Graphic Design II (formerly Production Techniques for Graphic Designers)****3 Units****Advisory:** ART 140 F or DART 100 F.

36 hours lecture and 54 hours lab per term. This is an advanced course in the study of methods and techniques used in producing advertising and design projects. Areas emphasized are electronic pre-press, typography and commercial printing methods. This course is oriented specifically to the needs of graphic design students. \$15 materials fee payable at registration. (CSU) (Degree Credit)

**ART 148 F Packaging Design****3 Units****Advisory:** ART 140 F

36 hours lecture and 54 hours lab per term. This is an advanced level course with emphasis on design for packaging. The assignments are intended to simulate real world experience and will include designing for a range of 3D surfaces. Finished comprehensive projects will be created on the computer to a professional quality. Students will be introduced to basic digital photography concepts for recording their work and creating images suitable for portfolio inclusion. \$15 materials fee is required at registration. (Degree Credit) (CSU)

**ART 152 F Ceramics Lab****1 Unit****Corequisite(s):** ART 153 F with a grade of C or better.

54 hours lab per term. This course provides students with an opportunity to work in the ceramics lab doing studio ceramics' activities including handbuilding techniques, slab, coil, pinch construction, glaze preparation and application, throwing on the potter's wheel, sculptural and combined building techniques and other studio activities. Open Entry/Open Exit. Pass/No Pass only. (Degree Credit) (CSU) (UC)

**ART 153 F Ceramics - Beginning Handbuilding (formerly ART 150AF)****3 Units**

36 hours lecture and 72 hours lab per term. This is a survey course dealing with three-dimensional design in clay as an entry into appreciation of the creative process and its physical execution using ceramic hand building techniques. Emphasis is placed on imagining, designing, creating, and evaluating vessel and sculptural form, using the coil, slab and pinch processes, and on textural and sculptural embellishment of surface. In addition, review of historical and traditional models, glazes, and firing are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**ART 154 F Ceramics - Beginning Throwing****3 Units****Prerequisite(s):** ART 153 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course is primarily about developing skill and technique in the use of the potter's wheel to create and finish controlled standard hollow forms. The class also includes an introduction to design, decoration, and glazing of wheel-thrown utilitarian forms, and basic technology of clay, glazes and firing. (Degree Credit) (CSU) (UC) AA GE, CSU GE

- ART 155 F Intermediate Ceramics** **3 Units**  
**Prerequisite(s):** ART 153 F or ART 154 F, with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course will offer the student more in-depth knowledge and refined skills in the study of hand building and/or wheel throwing techniques, design of forms, and surface decoration. Kiln operation is also emphasized. Development of further skills, knowledge, and conceptual ability is accomplished through individually determined projects. (Degree Credit) (CSU)
- ART 156 F Animal Drawing** **3 Units**  
**Advisory:** ART 182 F  
 54 hours lecture per term. This course covers the principles and practices of classical animal drawing skills, including comparative anatomy, form construction, gesture and motion. (Degree Credit) (CSU)
- ART 157 F Sketching for Animators and Illustrators** **3 Units**  
**Prerequisite(s):** ART 182 F with a grade of C or better  
**Advisory:** ART 186AF  
 36 hours lecture and 72 hours lab per term. This course is designed to enable the art student who wishes to develop drawing skills in the commercial fields of animation and/or illustration through focused study on quick sketch visualization, expressive anatomy, freehand perspective, character and storyboard development. (Degree Credit) (CSU)
- ART 160 F Fundamentals of Sculpture** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an examination of sculpture as a vehicle for social, political and cultural expression. Students are introduced to sculpture including basic concepts, materials, techniques, and terminology. This course focuses on modeling, casting, mold-making, and basic fabrication. This course is appropriate for the beginning student and those with limited sculpture experience. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 161 F Advanced Sculpture** **3 Units**  
**Advisory:** ART 160 F  
 36 hours lecture and analysis and 72 hours lab per term. This course is an introduction to the support processes of sculpture, to expand the development of techniques, materials and processes. Class requirements are arranged by contract to allow a wide diversity of projects. Emphasis is on development of individual style and the ability to plan and direct a semester of sculpture. (Degree Credit) (CSU) (UC)
- ART 162 F Sculpture Cast Metal - Beginning** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to the lost wax bronze casting process. This course includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. In consecutive semesters, the complexity of the projects require alternative skills, techniques, and materials. (Degree Credit) (CSU)
- ART 163 F Sculpture Open Studio** **1 Unit**  
**Corequisite(s):** Completion of, or concurrent enrollment in any of these 3-Dimensional courses: ART 121 F or ART 160 F or ART 161 F or ART 162 F or ART 164 F or ART 173 F or ART 174 F or ART 175 F or ART 176 F or ART 185 F or ART 262 F or ART 273 F or ART 274 F or ART 275 F or ART 276 F or ART 278 F or ART 285 F with a grade of C or better.  
 54 hours lab per term. This course gives access to the sculpture facility and equipment to work on new or ongoing projects. Activities include independently furthering technical development, exploring diverse sculptural media, and developing personal subject matter. (Degree Credit) (CSU)
- ART 164 F Sculpture: Metal Fabrication** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to the support processes of sculpture and is designed to expand student development of sculptured techniques, materials and processes. This course will focus on basic techniques and processes used for fabricating metal sculpture. An historical examination of sculpture as a vehicle for social, political and cultural expression. This course is not a substitute for any welding course. (Degree Credit) (CSU)
- ART 166 F Contemporary Art Studio** **3 Units**  
**Advisory:** Any art studio course or art history course with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is an introduction to the practices of contemporary art, including approaches to painting, sculpture, installation art, performance art, video, sound, and digital technologies. Students use traditional and digital processes to create works of art. This course is designed for Art majors. (Degree Credit) (CSU) (UC)
- ART 170 F Sketching for Animators and Illustrators- Visual Development (formerly ART 157 F)** **3 Units**  
**Prerequisite(s):** ART 157 F and ART 182 F with a grade of C or better.  
**Advisory:** ART 243 F and DART 135 F  
 36 hours lecture and 72 hours lab per term. This course is designed to introduce the student to the visual development workflow of production for animated feature films. Visual development artists are responsible for establishing the look and feel of a movie before it begins production. Visual development combines the highest level of design encompassing environments, characters, props and staging. (Degree Credit) (CSU)
- ART 173 F Jewelry Casting** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to basic concepts and techniques in designing and casting jewelry including reproduction techniques and wax models. The focus of this course is on originality in fine art jewelry design, relating to contemporary and historical design. (Degree Credit) (CSU) (C-ID: ARTS 281)
- ART 174 F Beginning Jewelry Fabrication** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to the concepts and techniques in the design and construction of jewelry and small metal objects. Fabrication techniques will require the cutting, forming, and soldering techniques of sheet metal. The focus of this course is on original design of fine art jewelry in precious metals. (Degree Credit) (CSU) AA GE, CSU GE
- ART 175 F Intermediate Jewelry Fabrication** **3 Units**  
**Prerequisite(s):** ART 174 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This class builds on skills and information gained in ART 174 F with refined concepts and techniques in the design and construction of jewelry and metal objects using cutting, forming and soldering. The focus of this course is on original design for fine art jewelry. (Degree Credit) (CSU)
- ART 176 F Stained Glass** **3 Units**  
 36 hours lecture and 72 hours lab per term. This course is an introduction to the stained glass process, including the basics of designing and constructing both two and three-dimensional stained glass projects using the "Tiffany Foil" technique and other cold glass processes such as mosaic and lamp building. Project emphasis will be in the design and fabrication of residential and commercial pieces. Other topics include overlay, sandblasting, fusing, and three dimensional and large scale projects. Production hours outside of class time are required. (Degree Credit) (CSU)

- ART 179 F Drawing for Non-Art Majors** **2 Units**  
18 hours lecture and 54 hours lab per term. This is a beginning course in traditional and contemporary drawing techniques and terminology with an emphasis on representational drawing accomplished with a variety of media, including, but not limited to, graphite, charcoal, conte, ink, oil and/or chalk pastel, and colored pencil. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 180 F Rendering** **3 Units**  
*Prerequisite(s):* ART 182 F with a grade of C or better.  
36 hours lecture and 72 hours lab per term. The main objective of this class is creating the illusion of three dimensions on a two-dimensional drawing surface. The lectures cover the basics of the visual perception of space, and the artistic techniques based on it. Rendering topics include explanations of the surface qualities of various materials, and the accurate depiction of the materials' interaction with light. Basics of perspective drawing will also be covered in this course. This course also meets student needs in advertising, illustration, and industrial design. (Degree Credit) (CSU)
- ART 181 F Drawing from the Masters** **3 Units**  
*Advisory:* ART 182 F and ART 186 F.  
54 hours lecture per term. This course covers working methods and media of master draftsmen from previous centuries. There is an emphasis on analyzing and copying master drawings in a variety of media. Further emphasis is placed on the traditional approach to drawing as practiced by masters such as Durer, Michelangelo, da Vinci, Raphael, Rubens and others. Field trips may be required outside of regularly scheduled class times. (Degree Credit) (CSU) (UC)
- ART 182 F Basic Drawing** **3 Units**  
36 hours lecture and 72 hours lab per term. This course is an introduction to the fundamentals of representational drawing. Media used may include pencil, ink, charcoal, conte, pastels, watercolor, and mixed media. This course is designed for art majors. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ARTS 110)
- ART 183 F Representational Drawing** **3 Units**  
*Advisory:* ART 127 F or ART 182 F.  
36 hours lecture and 72 hours lab per term. This course is a study in contemporary and traditional realism in the area of drawing. Media may include pencil, ink, charcoal, conte, pastel, watercolor, and/or mixed media. This course is recommended for Art majors. (Degree Credit) (CSU) (UC)
- ART 184 F Expressive Drawing** **3 Units**  
*Prerequisite(s):* ART 182 F with a grade of C or better.  
*Advisory:* ART 186 F  
36 hours lecture and 72 hours lab per term. This course surveys a variety of drawing styles introduced by artists whose mark making itself communicates emotion, whether or not recognizable objects are depicted. Starting with Van Gogh and continuing through German Expressionism and Abstract Expressionism, the course leads toward the development of a personal, contemporary drawing style. Media covered include ink, pastel, watercolor, collage and mixed media. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- ART 185 F Life Sculpture** **3 Units**  
36 hours lecture and 72 hours lab per term. This course is an introduction to figurative sculpture with emphasis on accurate anatomical training in sculpture. This course is designed to develop an understanding of the human form, this course focuses on structure, gesture and detail. The skeleton, plaster casts, and the life model are used in this process. (Degree Credit) (CSU) (UC) AA GE
- ART 186 F Beginning Life Drawing** **3 Units**  
*Advisory:* ART 137 F or ART 182 F.  
36 hours lecture and 72 hours lab per term. This course is an introductory course in drawing from the human figure. Course emphasis is on the development of a basic understanding of structure, anatomy and movement. The focus of this course is on accurate anatomical study, through continued use of the skeleton and life models. Required for all art majors. (Degree Credit) (CSU) (UC) AA GE (C-ID: ARTS 200)
- ART 187 F Watercolor for Non-Art Majors** **2 Units**  
18 hours lecture and 54 hours lab per term. This is an introductory course in watercolor painting with emphasis on a wide variety of traditional and contemporary techniques and skills. Creative self-expression is encouraged using the themes of still life, landscape and figurative. Media includes both transparent and opaque watercolor and related materials. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE
- ART 188 F Beginning Watercolor Painting** **3 Units**  
*Advisory:* ART 182 F  
36 hours lecture and 72 hours lab per term. This course will provide an understanding of the structure, techniques, and vocabulary of transparent watercolor painting as well as encourage the student to develop conceptual, perceptual, and technical knowledge of all the design elements. A variety of traditional and contemporary methods are presented through demonstration, lecture, videotapes, individual instruction, critiques and class discussions. (Degree Credit) (CSU) (UC) AA GE
- ART 189 F Beginning Painting** **3 Units**  
*Advisory:* ART 118 F and ART 182 F.  
36 hours lecture and 72 hours lab per term. This course is an introduction to materials and techniques of painting. The focus is on using observational skills to render basic objects using value, textures and principals of design. Students are developing elementary skills of painting as a means of self-expression. This course is required for art majors. (Degree Credit) (CSU) (UC) AA GE (C-ID: ART 210)
- ART 190 F Beginning Landscape Painting (formerly titled Applied Landscape)** **2 Units**  
*Prerequisite(s):* ART 188 F or ART 189 F, with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course is designed to provide students with the latest ideas in the study of landscape painting. Students will learn to paint landscapes, using oil or watercolor. Students will investigate landscape painting, both classic and contemporary approaches, using a variety of painting techniques. (Degree Credit) (CSU)
- ART 194 F Studio Painting Lab** **2 Units**  
*Prerequisite(s):* ART 189 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course provides the opportunity for the painting student to work on new or ongoing projects. Painting activities include improving skill level, furthering technical development, exploring diverse media, developing personal subject matter and style. Open Entry/Open Exit. (Degree Credit) (CSU)
- ART 195 F Anatomical Drawing** **3 Units**  
*Advisory:* ART 137 F or ART 182 F.  
54 hours lecture per term. The course explains and demonstrates how a specific area of the human body is constructed, how it moves and how it looks in different positions. The emphasis is on breaking the figure down into manageable components and learning to draw their three-dimensionality. There is an added emphasis on copying and analyzing a variety of anatomical studies to compile a notebook representing all of the components of the figure. This class serves the needs of the student in drawing, painting and sculpting the human figure. (Degree Credit) (CSU) (UC)

- ART 196HF Honors Creative Arts - Art** **3 Units**  
54 hours lecture per term. This Honors-enhanced course explores the nature of creativity through exposure to the performing arts, literature, and the fine arts. Students will make independent investigations into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students who receive credit in this course may not receive credit in MUS 196HF or THEA 196HF. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- ART 197 F Mural and Faux Painting** **3 Units**  
*Advisory:* ART 182 F or ART 189 F.  
36 hours lecture and 72 hours lab per term. This is an introductory course in which the fundamentals of faux (fake) finishes and mural painting will be explored. Students will learn how to execute a variety of finishes and create murals, how to bid jobs and how to work with a variety of materials. (Degree Credit)
- ART 201 F Intermediate Painting** **3 Units**  
*Prerequisite(s):* ART 189 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is a continuation of the study of painting techniques and media. Emphasis is on color theory, including use of color harmonies and creating atmospheric perspective. Recommended for art majors. (Degree Credit) (CSU) (UC)
- ART 202 F Advanced Painting I** **3 Units**  
*Prerequisite(s):* ART 201 F with a grade of C or better.  
36 hours lecture and 72 hours lab per term. This course is a continuation in the study of painting techniques and media for the advanced student. This course is a study of painting problems including: traditional and contemporary painting composition and methods with an emphasis on concept. (Degree Credit) (CSU) (UC)
- ART 203 F Advanced Painting II** **3 Units**  
*Prerequisite(s):* ART 202 F with a grade of C or better.  
36 hours lecture and 72 hours lab per term. This is a course in painting for advanced level students. Students will continue to build skills, including mastering their craft and techniques. Students will also develop competent skills in conveying challenging concepts and build a personal body of work. (Degree Credit) (CSU)
- ART 207 F Intermediate Mural and Faux Painting** **3 Units**  
*Prerequisite(s):* ART 197 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is a continuation of the study of mural painting techniques. Emphasis is on color, including use of color harmonies, rendering objects and perspective. Recommended for art majors. (Degree Credit) (CSU)
- ART 208 F Intermediate Watercolor** **3 Units**  
*Prerequisite(s):* ART 188 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is a continuation of development of watercolor techniques and processes. Emphasis is placed on understanding color and more complicated textures. (Degree Credit) (CSU) (UC)
- ART 209 F Intermediate Landscape Painting** **2 Units**  
*Prerequisite(s):* ART 190 F with a grade of C or better.  
*Advisory:* ART 182 F and ART 188 F.  
18 hours lecture and 54 hours lab per term. This course is designed to provide students with expanded and in-depth studies of landscape painting as a continuation from ART 190 F. Students will learn to paint using transparent and opaque painting methods from direct observations using a variety of painting techniques. Students will learn techniques of handling landscape painting in oil, watercolor, or gouache. (Degree Credit) (CSU)
- ART 210 F Life Painting** **3 Units**  
*Advisory:* ART 186 F and ART 189 F  
36 hours lecture and 72 hours lab per term. This course is an introduction to painting the human figure, nude and clothed. The emphasis is on realistic representation of the human form in oils and/or acrylic paint, using structure, color, value, lighting and composition. Historical and contemporary uses of the figure in art as well as various styles of painting will be explored. (Degree Credit) (CSU) AA GE
- ART 211 F Women in the Arts** **3 Units**  
54 hours lecture per term. This course examines the achievements and contributions of women in the arts from a global perspective throughout history. Topics include patronage, gender, sexuality, and feminist theory. Pass/No Pass or Letter Grade option. (Degree Credit) (CSU) IGETC
- ART 212 F Art History - The Art of Asia** **3 Units**  
54 hours lecture per term. This course is a survey of the arts of India, China, Japan, Korea and Southeast Asia from prehistory through the 19th century. It examines the role of the visual arts in relation to society, religion, and history, while identifying major themes and techniques in these arts. Classroom presentations are supplemented by gallery and museum visits. Pass/No Pass or Letter Grade option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ARTH 130)
- ART 213 F Art History: Pre-Columbian Art** **3 Units**  
54 hours lecture per term. This course is a survey of the architecture, sculpture, painting and ceramics of Pre-Columbian Mexico, Central, North and South America from formative through post-classic times. Slide lectures, videos and museum visits will supplement the course. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- ART 214 F Perspective and Staging for Storyboarding** **3 Units**  
*Prerequisite(s):* ART 137 F or ART 182 F, with a grade of C or better.  
*Advisory:* ART 243 F, DART 100 F and DART 107 F  
36 hours lecture and 72 hours lab per term. This course is designed to prepare and equip the art student with a functional understanding of draftsmanship and perspective as it relates to the staging/drawing of characters, animals, and vehicles in a perspective environment for storyboarding. (Degree Credit) (CSU)
- ART 215 F Beginning Storyboarding and Narrative Composition (formerly ART 090BF)** **3 Units**  
*Prerequisite(s):* ART 182 F with a grade of C or better  
54 hours lecture per term. This course is designed to equip the art student with a functional understanding of narrative composition, storytelling, sequence design, and production skills for feature film storyboarding through focused study on narrative design and illustration, script breakdowns and storyboard development and formatting. (Degree Credit) (CSU)
- ART 216 F Advanced Storyboarding and Pre-Visual Preparation** **3 Units**  
*Prerequisite(s):* ART 182 F, ART 215 F and DART 100 F, with a grade of C or better.  
54 hours lecture per term. This advanced course is designed to equip the art student with a functional understanding of storyboarding and production skills for animatic and pre-visualization for feature films, TV, animation, and video games through focused study on storyboarding with Photoshop software. (Degree Credit) (CSU)

**ART 217 F Children's Book Illustration (formerly ART 090DF) 3 Units****Advisory:** ART 182 F and ART 186 F

36 hours lecture and 72 hours lab per term. This course focuses on a specific format: the page-by-page layout of "picture books" that give the reader an image on every page. It involves an understanding of the history, methods, and markets of children's books, and the components of illustrated children's stories. Emphasis is on developing an efficient creative process to produce a unified collection of images that serve a story in children's terms. This includes research and immersion in children's books to understand their forms, moods, themes, and styles; exercises to develop compositional and storytelling skills; and producing page layouts to be developed into finished art. This course will spotlight classic masters, deriving lessons from their work, processes and careers. (Degree Credit) (CSU)

**ART 218 F Visual Storytelling: Structure and Form 3 Units****Advisory:** ART 182 F or portfolio review with instructor.

36 hours lecture and 72 hours lab per term. This course will introduce students to the classic structures of story and why the visual story requires unique demands and offers unique opportunities. The camera and the image reveal structure to the audience, and the form gives meaning to the events. Students will study the forms and formats of graphic novels, animations, and films, to help them create their own story works and characters to be developed into finished visual stories. This class is recommended to first semester Visual Storytelling students but can be taken at any time. (Degree Credit) (CSU)

**ART 219 F Visual Storytelling: Image and Sequence 3 Units****Advisory:** ART 182 F or portfolio review

36 hours lecture and 72 hours lab per term. This course is an introduction to how professional visual storytellers create characters, craft story structure, design images, and assemble them in a sequence to entertain an audience. The class features analysis of master stories in visual media, and feedback on student assignments, which include developing story ideas and creating a finished image-told story "pitch" for animation or film. (Degree Credit) (CSU)

**ART 220 F Genre and Style in Entertainment Art 3 Units****Advisory:** ART 182 F and DART 100 F or portfolio review by instructor

36 hours lecture and 72 hours lab per term. This course will introduce students to the variety of genres in entertainment and visual storytelling, to offer a broad knowledge base from which to design and develop content for global markets. This course features analysis of genre elements, visual styles, and the interplay between form and content that allows genres to evolve while keeping a consistent historical continuity. Students will research a visual story genre to trace its evolution, and develop a story premise into contrasting styles. (Degree Credit) (CSU)

**ART 221 F Staging and Scene Development 3 Units****Prerequisite(s):** ART 182 F with a grade of C or better.**Advisory:** ART 243 F.

36 hours lecture and 72 hours lab per term. This course will introduce students to the techniques of story illustrators and animators of how to create scenes that hook, compel, and satisfy an audience, using the tools that writers and actors use on stage within a pictorial frame that has unique limitations, opportunities, and dynamics. The emphasis is on individual scenes, how character objectives and emotions lead to visible action, and how to frame a scene for the camera to augment the emotional effect. Lessons will apply to a variety of styles and moods of visual stories. Assignments include analysis of master scenes, creation of original scenes, and reducing multi-panel scenes to single images. (Degree Credit) (CSU)

**ART 222 F Composition for Artists: Elements and Principles 3 Units****Advisory:** ART 182 F and DART 100 F.

54 hours lecture and 72 hours lab per term. This course focuses on how master artists evoke feeling, not from the subject matter, but from the design. We will learn how image makers create work in many different styles using basic compositional principles that guide all artistic forms. (Degree Credit) (CSU)

**ART 223 F Composition for Artists: Master Studies 3 Units****Advisory:** ART 182 F and ART 222 F and DART 100 F.

36 hours lecture and 72 hours lab per term. This course is a continuation in the development of the lessons and principles presented in ART 222 F by focusing on a variety of compositional forms used in different eras and schools throughout art history. Students will be assigned a series of historical masterpieces to analyze by naming the elements used in the composition, and identifying the strategies used by the artist in applying the principles of unity and diversity. (Degree Credit) (CSU)

**ART 225 F Illustrating Literature 3 Units****Advisory:** ART 137 F or ART 182 F and ART 243 F.

36 hours lecture and 72 hours lab per term. This course focuses on adapting stories from classic literature into a unified collection of single images. Unlike graphic novel or storyboard imagery, classic book illustrations augment a story rather than tell it. This involves research and immersion in the story to understand its context, form, and themes; understanding story elements such as character crises, scenes, and beats; and image elements such as characterization, point of view, and image style. Students will develop an efficient creative process by generating multiple image options through thumbnails and comp studies before developing finished images. The course spotlights classic masters such as Gustave Dore, Edmund Dulac, Howard Pyle, N.C. Whyeth, and many others, deriving lessons from their work, processes and careers. (Degree Credit) (CSU)

**ART 236 F Intermediate Life Drawing 3 Units****Prerequisite(s):** ART 186 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This is an intermediate course in drawing the human figure. The course emphasis is on the refinement of basic skills, exercises and anatomy. Complex techniques and the continued use of the skeleton and life model to reinforce the technical skill and knowledge as it relates to gesture, structure and anatomy. Recommended for all art majors. (Degree Credit) (CSU) (UC)

**ART 241 F Typography II 3 Units****Advisory:** ART 141 F.

36 hours lecture and 54 hours lab per term. This course is an advanced course in the use of type and typography in the production of print and digital graphic design projects. (CSU) (Degree Credit)

**ART 243 F Applied Perspective 3 Units****Advisory:** ART 182 F

36 hours lecture and 72 hours lab per term. This course will introduce the student to the rules of perspective and demonstrate application methods applied to common projects within the field of entertainment, strengthening student draftsmanship. Instructor lectures and demonstrations will illustrate application methods governing the principles of mathematical perspective applied to drawing techniques. (Degree Credit) (CSU)



- ART 244 F Illustration** 3 Units  
*Advisory:* ART 182 F  
 36 hours lecture and 72 hours lab per term. The lecture portion of this course covers problems of creating finished illustrations from thumbnail sketches to final art. Emphasis in this course is on illustration for printed media such as books, newspapers, and magazines, as well as conceptual design for industrial products, and illustration for the electronic entertainment, theme park, and motion picture industries. Projects are designed to prepare the student for the professional skills necessary in creating an industry appropriate portfolio of work. (Degree Credit) (CSU)
- ART 245 F Classical Cast Drawing** 3 Units  
*Advisory:* ART 182 F and ART 186 F.  
 36 hours lecture and 72 hours lab per term. This course is the study and depiction of the human head and body through the process of drawing and rendering of classical cast sculpture. Drawings will be executed in a variety of media including charcoal, colored pencil, and graphite. This course is design for Art majors. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- ART 246 F Advanced Illustration** 3 Units  
*Advisory:* ART 244 F  
 36 hours lecture and 72 hours lab per term. This advanced course presents the student with the opportunity to create an elevated and accelerated level of problem solving within the creation of finished illustrations, from thumbnail sketches to final art. Emphasis in this course is on illustration for printed media such as books, newspapers, and magazines, as well as illustration for the electronic entertainment, theme park, and motion picture industries. Projects are designed to prepare the student for the professional skills necessary in creating an industry appropriate portfolio of work. (Degree Credit) (CSU)
- ART 247 F Sketching for Animators and Illustrators - Traditional Media Techniques** 3 Units  
*Prerequisite(s):* ART 182 F with a grade of C or better  
*Advisory:* ART 186 F and ART 243 F  
 36 hours lecture and 72 hours lab per term. This course will introduce the student to the professional application practices of using traditional media techniques for developing artwork for the fields of entertainment. Areas of focus include rapid visualization to final art production using watercolor, markers, pen, ink, and color pencil. (Degree Credit) (CSU)
- ART 254 F Advanced Ceramics** 3 Units  
*Prerequisite(s):* ART 155 F or ART 154 F, with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is an advanced study of hand building and/or wheel throwing techniques, design of form, and surface decoration. Kiln operation is also emphasized. Development of refined skills, expanded knowledge, and a higher level of conceptual ability is accomplished through individually determined projects. (Degree Credit) (CSU)
- ART 258 F Tile I** 3 Units  
*Advisory:* ART 120 F and ART 153 F  
 36 hours lecture and 72 hours lab per term. This course is an introduction to ceramic tile making techniques. Emphasis is placed on tile design and its purpose, production, and finish. Multiple methods of production and decoration will be covered as well as basic setting procedures. In addition, review of historical and traditional models and their relevance to contemporary tile design and tile making will be included. (CSU)
- ART 259 F Tile II** 3 Units  
*Prerequisite(s):* ART 258 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is an advancement into ceramic tile design and production techniques. Emphasis is placed on development of the tile designs that are more advanced in both design and finish while having the student develop a personal approach to the medium. (Degree Credit) (CSU)
- ART 260 F Tile III** 3 Units  
*Prerequisite(s):* ART 259 F with a grade of C or better.  
 36 hours lecture and 72 hours lab per term. This course is a deeper exploration into ceramic tile design and production techniques. Emphasis is placed on development of tile designs that are challenging in scope and scale while having the student hone their own personal approach to the medium. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- ART 261 F Sculpture - Ceramics** 3 Units  
*Prerequisite(s):* ART 153 F or ART 160 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is an exploration of the methods, limitations and characteristics of various clays when used to create sculpture in the round and bas-relief. (Degree Credit) (CSU) (UC)
- ART 262 F Cast Metal: Intermediate** 3 Units  
*Advisory:* ART 162 F  
 36 hours lecture and 72 hours lab per term. This course is designed for the student to acquire improved skills in the concepts of cast metal sculpture. Student will employ and refine skills in lost wax bronze casting process. This class includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. (Degree Credit) (CSU)
- ART 263 F Cast Metal: Advanced** 3 Units  
*Prerequisite(s):* ART 262 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This is an advanced course investigating the concepts of cast metal sculpture. Students will create work using the lost wax bronze casting process. This class includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. The complexity of the designs requires alternative skills, techniques and materials. (Degree Credit) (CSU)
- ART 264 F Cast Metal: Studio Concepts** 3 Units  
*Prerequisite(s):* ART 263 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is an advanced investigation into the concepts of cast metal sculpture. Students will employ lost wax bronze casting process. This course includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. In consecutive semesters, the complexity of the projects require alternative skills, techniques and materials. (Degree Credit) (CSU)
- ART 268 F Advanced Sculpture II** 3 Units  
*Prerequisite(s):* ART 161 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course is an investigation of advanced sculptural concepts with an emphasis on the development of an individual body of work. This course advances the research, execution, and artistic intention of a body of work. Class requirements are arranged by contract to allow a wide diversity of projects. (Degree Credit) (CSU)

**ART 271 F Fabrication III: Mold Making, Casting and Vacuum Forming****3 Units**

36 hours lecture and 72 hours lab per term. This course teaches both principles and practical application of mold making, casting and vacuum-forming for the reproduction of prototypes. From health and safety consideration, tools, materials and their application, students will have extensive hands-on practice, allowing them to acquire experience necessary to advance in the creative industries of their choice. (Degree Credit) (CSU)

**ART 273 F Intermediate Jewelry Casting****3 Units**

36 hours lecture and 72 hours lab per term. This intermediate course focuses on concepts and techniques acquired in previous exercises, in the designing of wax models and casting of fine art jewelry and small objects. This course involves advanced problems in casting. (Degree Credit) (CSU)

**ART 274 F Advanced Jewelry Casting****3 Units****Advisory:** ART 173 F.

36 hours of lecture and 72 hours lab (studio) per term. This advanced jewelry course focuses on concepts and techniques that are essential in refined levels of jewelry design. The progression of skills is necessary for the success of the advanced student in jewelry casting. (Degree Credit) (CSU)

**ART 275 F Studio Concepts: Jewelry Casting****3 Units****Advisory:** ART 173 F

36 hours lecture and 72 hours lab per term. This course focuses on acquiring skills, concepts, and techniques that are essential in the highest levels of jewelry casting. This course also focuses on the development of a portfolio of design, drawings, wax models, molds and cast metal Fine Art Jewelry. (Degree Credit) (CSU)

**ART 276 F Advanced Jewelry Fabrication****3 Units****Prerequisite(s):** ART 175 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course builds on skills on previous skills, design concepts and information gained in ART 175 F. In addition to the refinement of previous skills, use of mechanically-formed components are used in combination. (Degree Credit) (CSU)

**ART 277 F Studio Concepts: Jewelry Fabrication****3 Units****Prerequisite(s):** ART 276 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course focuses on previous exercises and further emphasis is on technical skill in jewelry fabrication, development of a portfolio with presentation of jewelry designs, working drawings, renderings, and fabricated metal fine art jewelry. (Degree Credit) (CSU)

**ART 278 F Intermediate Stained Glass****3 Units****Prerequisite(s):** ART 176 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course demonstrates further progress in developing the skill of contemporary and traditional processes in cold glass within the "Tiffany Foil" techniques of overlay and sandblasting. The student will also be introduced to the hot glass processes of fusing, slumping, and glass painting. The hot glass process will include both kiln and torch work. Project emphasis will be in the design and fabrication of three dimensional and large scale projects in both hot glass and cold glass. (Degree Credit) (CSU)

**ART 280 F Rendering II****3 Units****Prerequisite(s):** ART 182 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course is a continuation of the focus and skill-building of the first Rendering course. The main objective of this course is creating the illusion of three dimensions on a two-dimensional drawing surface. The work covers the visual perception of space, and the artistic techniques based on it. Rendering topics include explanations of the surface qualities of various materials, and teh accurate depiction of the materials' interaction with light. This course also meets student needs in advertising, illustration and industrial design. Field trips may also be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ART 281 F Drawing from the Masters II****3 Units****Advisory:** ART 182 F and ART 186 F.

54 hours lecture per term. This course covers working methods and media of master draftsmen from the 18th through the 21st centuries. There is an emphasis on analyzing and copying master drawings in a variety of media. Further emphasis is placed on the traditional approach to drawing as practiced by masters such as Daumier, Dgas, Goya, Sargent, Homer, and illustrators from the Golden Age of American Illustration. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ART 285 F Intermediate Life Sculpture****3 Units****Prerequisite(s):** ART 185 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This is an intermediate level course in Life Sculpture. This course is focused on a review of sculpture exercises in figurative sculpture with emphasis on refinement of accurate anatomical sculpture. (Degree Credit) (CSU)

**ART 286 F Advanced Life Drawing****3 Units****Prerequisite(s):** ART 236 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This is an advanced course in drawing the human figure, the emphasis of this course is a focused review of previous drawing exercises and the refinement of techniques. Advanced studio problems will be addressed, with historical and contemporary examples. Recommended for art majors. (Degree Credit) (CSU) (UC)

**ART 287 F Advanced Life Sculpture****3 Units****Prerequisite(s):** ART 285 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course focuses on previous exercises and further development of advanced skills and techniques used in the sculpting of accurate human anatomy with consistent detail. (Degree Credit) (CSU)

**ART 288 F Advanced Life Sculpture II****3 Units****Prerequisite(s):** ART 287 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course focuses on the previous exercises and further development of sculpture, skills, techniques and fine detail used in accurate human anatomy. Further development of the figure in bas-relief will be explored. (Degree Credit) (CSU)

**ART 290 F Portfolio Preparation and Artwork Presentation****3 Units****Advisory:** Six units of art, design or computer graphics (DART) courses

54 hours lecture per term. This course will help studio arts and design majors in the creation of a portfolio that will assist in the transfer towards a BA or BFA university art program. Major emphasis is placed on the development of a professional portfolio and the quality of the artwork in it. (Degree Credit) (CSU)

**ART 291 F Applied Painting: Expressive 3 Units**

**Prerequisite(s):** ART 189 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This class surveys a variety of painting styles. Emphasis is on emotionally and expressive interpretation of an object or idea through use of color, composition and paint application. Fundamental painting skills, will be needed. Classic and contemporary approaches will be applied. (Degree Credit) (CSU)

**ART 292 F Painting: Political and Social Issues 3 Units**

**Prerequisite(s):** ART 189 F with a grade of C or better.  
26 hours and 72 hours lab per term. This course is to give students the tools for communicating ideas, concepts, observations and opinions through painting, using style, compositions, application of paint and mixed media. Classic and contemporary approaches will be applied to this subject matter. (Degree Credit) (CSU)

**ART 293 F Painting: Narrative 3 Units**

**Prerequisite(s):** ART 189 F with a grade of C or better.  
36 hours lecture and 72 hours lab per term. This course surveys a variety of painting styles to give students the tools for communicating a narrative theme through painting. (Degree Credit) (CSU)

**ART 294 F Independent Study: Illustration 1-2 Units**

**Prerequisite(s):** ART 244 F and ART 246 F, with a grade of C or better  
54-108 hours independent study per term. This independent study course is for the student who wishes to pursue a more thorough understanding of the field of Illustration through application of creative design, technical ability, and execution of craft. Instructor approval is required. (Degree Credit) (CSU) (UC review required)

**ART 295 F Independent Study: Painting 1-2 Units**

**Prerequisite(s):** ART 188 F or ART 201 F, with a grade of C or better  
**Advisory:** ART 120 F  
54-108 hours independent study per term. This course is for the advanced student who wishes to pursue painting through individual study. Instructor approval is required. (Degree Credit) (CSU) (UC review required)

**ART 296 F Independent Study: Museum Studies 1-2 Units**

**Prerequisite(s):** ART 122 F with a grade of C or better  
54-108 hours independent study per term. This course is for students who wish to pursue museum studies through individual study. Students will pursue a more thorough understanding of the field of museum studies through application of skills to gallery and permanent collection projects. Instructor approval is required. (Degree Credit) (CSU) (UC review required)

**ART 297 F Independent Study: Ceramics 1-2 Units**

**Prerequisite(s):** ART 254 F or ART 260 F with a grade of C or better  
54-108 hours independent study per term. This course is for students who wish to pursue ceramics through individual study. Students will plan an appropriate project or group of projects that allow greater development and understanding of the ceramic process through applied practice of the specific techniques chosen by the student. Instructor approval is required. (Degree Credit) (CSU) (UC review required)

**ART 298 F Arts Internship 2-4 Units**

**Advisory:** 6-9 units of art courses which may include art history, design, studio art, business practices in art, portfolio preparation or digital art.  
18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide professional artistic work experience directly related to the student's area of study. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills. This course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

**ART 299 F Art Independent Study 1-2 Units**

**Prerequisite(s):** A grade of C or better in at least one semester's previous work in the subject of the independent study as well as a foundation in creative design, technical ability, and execution of craft.  
54-108 hours independent study per term. This course is for students who wish to pursue a particular area of art through individual study. Instructor approval is required. (Degree Credit) (CSU) (UC Credit Limitation)

## Advertising and Graphic Design Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03852

The **Advertising and Graphic Design Associate in Arts Degree** is designed for students seeking employment in the advertising and graphic design industry. Students are guided through presentation and portfolio creation process throughout the program. This program is not designed to transfer to a UC or CSU institution, but may transfer to a private four-year school of art with specialized focus on Advertising and Graphic Arts. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
ART 140 F	Graphic Design I (formerly Introduction to Advertising and Graphic Design)	3
ART 145 F	Publication Design	3
ART 147 F	Graphic Design II (formerly Production Techniques for Graphic Designers)	3
DART 100 F	Introduction to Digital Art	3
<b>Restricted Electives (6 units):</b>		
ART 123 F	Business Practices in Art	3
ART 146 F	Advertising Design	3
ART 148 F	Packaging Design	3
DART 112 F	Vector Graphics	3
DART 132 F	Digital Imaging I	3
DART 140 F	Digital Publishing I	3
DART 146 F	Digital Publishing II	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Create computer generated, comprehensive, publication designs that are suitable for inclusion in a student's portfolio.

**Outcome 2:** Demonstrate an advanced understanding of electronic prepress, typography, paper specification, and commercial printing methods.

**Outcome 3:** Apply the terminology of computer graphics to communications within the field of digital media.

**Outcome 4:** Demonstrate a beginning knowledge of contemporary and historical graphic design.

# Advertising and Graphic Design Certificate

Division: Fine Arts

## Requirements

PROGRAM CODE: 2C35894

The **Advertising and Graphic Design Certificate** is designed to prepare students for entry-level positions in the professions of advertising, graphic design or allied profession. The hands-on classes allow a student to create professional quality designs suitable for inclusion in a portfolio. This certificate requires a total of 40-41 units. A minimum grade of C is required in each course taken.

Code	Title	Units
<b>Required Courses (34-35 units):</b>		
ART 123 F	Business Practices in Art	3
ART 140 F	Graphic Design I (formerly Introduction to Advertising and Graphic Design)	3
ART 145 F	Publication Design	3
ART 146 F	Advertising Design	3
ART 147 F	Graphic Design II (formerly Production Techniques for Graphic Designers)	3
ART 148 F	Packaging Design	3
ART 299 F	Art Independent Study	1-2
DART 100 F	Introduction to Digital Art	3
DART 112 F	Vector Graphics	3
DART 132 F	Digital Imaging I	3
DART 140 F	Digital Publishing I	3
DART 146 F	Digital Publishing II	3
<b>Restricted Electives (6 units):</b>		
ART 118 F	Color Theory	3
ART 120 F	Basic Design	3
ART 182 F	Basic Drawing	3
DART 170 F	Digital Photo Editing I	3
PHOT 101 F	Introduction to Photography	3
PRNT 101 F	Introduction to Printing	3
<b>Total Units</b>		<b>40-41</b>

## Program Student Learning Outcomes

**Outcome 1:** Create computer-generated publication designs that are suitable for inclusion in a student's portfolio.

**Outcome 2:** Demonstrate an understanding of electronic pre-press, typography, paper specification, and commercial printing methods.

**Outcome 3:** Apply the terminology of computer graphics to communications within the field of digital media.

## Art Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03847

The **Art Associate in Arts Degree** is designed to prepare students for possible careers in the different fields of Fine Arts, including Gallery presentation, Sculpture, Painting, and Ceramics. It is also very good preparation for possible transfer to a four-year public or private Art Institute or university. This degree requires the completion of 18 units.

Code	Title	Units
<b>Required Courses - Art History (3 units):</b>		
ART 112 F	Art History - Ancient to Medieval	3
ART 113 F	Art History - Renaissance to Modern	3
ART 114 F	Art History - Impressionism to Present	3
ART 116 F	Art History - The Art of Mexico	3
ART 212 F	Art History - The Art of Asia	3
<b>List A (3 units):</b>		
ART 120 F	Basic Design	3
ART 182 F	Basic Drawing	3
<b>List B (3 units):</b>		
ART 121 F	Three-Dimensional Design	3
ART 153 F	Ceramics - Beginning Handbuilding (formerly ART 150AF)	3
ART 160 F	Fundamentals of Sculpture	3
ART 174 F	Beginning Jewelry Fabrication	3
ART 176 F	Stained Glass	3
ART 185 F	Life Sculpture	3
ART 189 F	Beginning Painting	3
<b>List C (9 units):</b>		
<b>Any ART course or any course from List A, B or C not already selected:</b>		
ART 090 F	Advanced Topics in Art	3
ART 100 F	Fundamentals of Art	3
ART 113HF	Honors Art History - Renaissance to Modern	3
ART 115 F	The Museum Experience (formerly Museum Survey)	3
ART 117 F	Art History - American Art	3
ART 118 F	Color Theory	3
ART 122 F	Museum Studies - Introduction to Gallery Practices	3
ART 123 F	Business Practices in Art	3
ART 124 F	Museum Studies - Exhibition Production	3
ART 125 F	Museum Studies - Exhibition Design and Careers	3
ART 127 F	Beginning Floral Painting (formerly Applied Painting - Floral)	2
ART 128 F	Portrait Painting	2
ART 129 F	Portrait Drawing	2
ART 130 F	Intermediate Portrait Drawing	2
ART 131 F	Introduction to Printmaking	3
ART 132 F	Intermediate Printmaking	3
ART 137 F	Basic Drawing for Entertainment Arts	3
ART 138 F	History of Graphic Design	3
ART 139 F	Fashion Sketching	2
ART 140 F	Graphic Design I (formerly Introduction to Advertising and Graphic Design)	3
ART 141 F	Typography	3

ART 142 F	User Experience - UX Design	3	ART 223 F	Composition for Artists: Master Studies	3
ART 143 F	Basic Drawing for Entertainment Arts - Drawing from the Imagination	3	ART 225 F	Illustrating Literature	3
ART 144 F	Fundamentals of Cartooning	2	ART 236 F	Intermediate Life Drawing	3
ART 145 F	Publication Design	3	ART 241 F	Typography II	3
ART 146 F	Advertising Design	3	ART 243 F	Applied Perspective	3
ART 147 F	Graphic Design II (formerly Production Techniques for Graphic Designers)	3	ART 244 F	Illustration	3
ART 148 F	Packaging Design	3	ART 245 F	Classical Cast Drawing	3
ART 152 F	Ceramics Lab	1	ART 246 F	Advanced Illustration	3
ART 154 F	Ceramics - Beginning Throwing	3	ART 247 F	Sketching for Animators and Illustrators - Traditional Media Techniques	3
ART 155 F	Intermediate Ceramics	3	ART 254 F	Advanced Ceramics	3
ART 156 F	Animal Drawing	3	ART 258 F	Tile I	3
ART 157 F	Sketching for Animators and Illustrators	3	ART 259 F	Tile II	3
ART 161 F	Advanced Sculpture	3	ART 260 F	Tile III	3
ART 162 F	Sculpture Cast Metal - Beginning	3	ART 261 F	Sculpture - Ceramics	3
ART 163 F	Sculpture Open Studio	1	ART 262 F	Cast Metal: Intermediate	3
ART 164 F	Sculpture: Metal Fabrication	3	ART 263 F	Cast Metal: Advanced	3
ART 166 F	Contemporary Art Studio	3	ART 264 F	Cast Metal: Studio Concepts	3
ART 170 F	Sketching for Animators and Illustrators- Visual Development (formerly ART 157 F)	3	ART 268 F	Advanced Sculpture II	3
ART 173 F	Jewelry Casting	3	ART 271 F	Fabrication III: Mold Making, Casting and Vacuum Forming	3
ART 175 F	Intermediate Jewelry Fabrication	3	ART 273 F	Intermediate Jewelry Casting	3
ART 180 F	Rendering	3	ART 274 F	Advanced Jewelry Casting	3
ART 181 F	Drawing from the Masters	3	ART 275 F	Studio Concepts: Jewelry Casting	3
ART 183 F	Representational Drawing	3	ART 276 F	Advanced Jewelry Fabrication	3
ART 184 F	Expressive Drawing	3	ART 277 F	Studio Concepts: Jewelry Fabrication	3
ART 186 F	Beginning Life Drawing	3	ART 278 F	Intermediate Stained Glass	3
ART 188 F	Beginning Watercolor Painting	3	ART 280 F	Rendering II	3
ART 195 F	Anatomical Drawing	3	ART 281 F	Drawing from the Masters II	3
ART 196HF	Honors Creative Arts - Art	3	ART 285 F	Intermediate Life Sculpture	3
ART 197 F	Mural and Faux Painting	3	ART 286 F	Advanced Life Drawing	3
ART 201 F	Intermediate Painting	3	ART 287 F	Advanced Life Sculpture	3
ART 202 F	Advanced Painting I	3	ART 288 F	Advanced Life Sculpture II	3
ART 203 F	Advanced Painting II	3	ART 290 F	Portfolio Preparation and Artwork Presentation	3
ART 207 F	Intermediate Mural and Faux Painting	3	ART 291 F	Applied Painting: Expressive	3
ART 208 F	Intermediate Watercolor	3	ART 292 F	Painting: Political and Social Issues	3
ART 209 F	Intermediate Landscape Painting	2	ART 293 F	Painting: Narrative	3
ART 210 F	Life Painting	3	ART 294 F	Independent Study: Illustration	1-2
ART 211 F	Women in the Arts	3	ART 295 F	Independent Study: Painting	1-2
ART 213 F	Art History: Pre-Columbian Art	3	ART 296 F	Independent Study: Museum Studies	1-2
ART 215 F	Beginning Storyboarding and Narrative Composition (formerly ART 090BF)	3	ART 297 F	Independent Study: Ceramics	1-2
ART 216 F	Advanced Storyboarding and Pre-Visual Preparation	3	ART 298 F	Arts Internship	2-4
ART 217 F	Children's Book Illustration (formerly ART 090DF)	3	ART 299 F	Art Independent Study	1-2
ART 218 F	Visual Storytelling: Structure and Form	3			
ART 219 F	Visual Storytelling: Image and Sequence	3			
ART 220 F	Genre and Style in Entertainment Art	3			
ART 221 F	Staging and Scene Development	3			
ART 222 F	Composition for Artists: Elements and Principles	3			
				<b>Total Units</b>	<b>18</b>
<hr/>					
<b>Program Student Learning Outcomes</b>					
<b>Outcome 1:</b> <i>Demonstrate an understanding of, and show proficiency in, the fundamentals of art making with various tools and materials.</i>					
<b>Outcome 2:</b> <i>Demonstrate an understanding of the fundamental elements in art and be able to identify a variety of medias within the context of Art History.</i>					

**Outcome 3:** Formulate conceptual considerations as they relate to the creation of art and design.

**Outcome 4:** Determine artistic solutions to visual design problems in multiple genres.

**Outcome 5:** Recognize and describe excellence in art.

## Art History and Museum Studies Associate in Arts Degree

Division: Fine Arts

### Requirements

PROGRAM CODE: 2A37747

The **Art History/Museum Studies Associate in Arts Degree** prepares students to transfer to a university that offers bachelor's degrees in Art History, especially those that offer a specialization in Museum Studies. A bachelor's degree in Art History/ Museum Studies provides a foundation for gallery and museum careers and/or postgraduate study. This program requires a total of 27-28 units of required courses and restricted electives.

Code	Title	Units
<b>Required Core Courses (9 units):</b>		
ART 112 F	Art History - Ancient to Medieval	3
ART 113 F	Art History - Renaissance to Modern	3
or ART 113HF	Honors Art History - Renaissance to Modern	
ART 182 F	Basic Drawing	3
<b>Restricted Electives (18-19 units):</b>		<b>18-19</b>
<i>List A - Select one of the following (3 units):</i>		
ART 116 F	Art History - The Art of Mexico	3
ART 212 F	Art History - The Art of Asia	3
<i>List B - Select one of the following (3 units):</i>		
ART 120 F	Basic Design	3
ART 121 F	Three-Dimensional Design	3
ART 153 F	Ceramics - Beginning Handbuilding (formerly ART 150AF)	3
ART 186 F	Beginning Life Drawing	3
DART 100 F	Introduction to Digital Art	3
DART 170 F	Digital Photo Editing I	3
PHOT 101 F	Introduction to Photography	3
<i>List C - Select one of the following (3 units):</i>		
Any course from List A or List B not already chosen, or:		
ART 114 F	Art History - Impressionism to Present	3
ART 117 F	Art History - American Art	3
ART 213 F	Art History: Pre-Columbian Art	3
<i>List D - Select three courses from the following (9-10 units):</i>		
ART 115 F	The Museum Experience (formerly Museum Survey)	3
ART 122 F	Museum Studies - Introduction to Gallery Practices	3
ART 124 F	Museum Studies - Exhibition Production	3
ART 125 F	Museum Studies - Exhibition Design and Careers	3

ART 298 F	Arts Internship	2-4
<b>Total Units</b>		<b>27-28</b>

### Program Student Learning Outcomes

**Outcome 1:** Identify important European works of art by Michelangelo, da Vinci, Rembrandt, Goya, and other seminal figures of European art and architecture and/or from global art histories.

**Outcome 2:** Prepare in-depth analysis of a museum exhibition, addressing concerns of layout, flow, use of color, educational materials including didactic panels, and curatorial concept.

## Art History Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A31529

The **Art History Associate in Arts Degree for Transfer**, also called the Art History AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Art History. Ed Code Section 66746-66749 states students earning the Art History AA-T will be granted priority for admission as an Art History major to a local CSU, as determined by the CSU campus to which the student applies. A bachelor's degree in Art History prepares students for employment in curatorial work for the gallery and museum system. In addition, a bachelor's degree in Art History provides a solid foundation for advanced training in the more technical areas of art restoration and conservation, as well an introduction to art theory, methodology, and criticism – areas of study which are key to studies of art at the post-graduate level. The Art History AA-T Degree program requires a total of 18 units.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (9 units):</b>		
ART 112 F	Art History - Ancient to Medieval	3
ART 113 F	Art History - Renaissance to Modern	3
ART 182 F	Basic Drawing	3
<b>List A (3 units):</b>		<b>3</b>
ART 116 F	Art History - The Art of Mexico	3

ART 212 F	Art History - The Art of Asia	3
ART 213 F	Art History: Pre-Columbian Art	3
<b>List B (3 units):</b>		<b>3</b>
ART 120 F	Basic Design	3
ART 121 F	Three-Dimensional Design	3
ART 153 F	Ceramics - Beginning Handbuilding (formerly ART 150AF)	3
ART 160 F	Fundamentals of Sculpture	3
ART 186 F	Beginning Life Drawing	3
DART 100 F	Introduction to Digital Art	3
<b>List C - Select one course from the following or a course from List A or List B not already selected (3 units):</b>		<b>3</b>
ART 114 F	Art History - Impressionism to Present	3
ART 117 F	Art History - American Art	3
ART 211 F	Women in the Arts	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify key works of art and architecture from a variety of ancient cultures and understand their significance within a social-political context.

**Outcome 2:** Identify key works of art and architecture by artists from the Renaissance to the modern era and understand their significance within a social-political context.

**Outcome 3:** Identify important works of art and architecture from the modern and contemporary periods and understand their significance within a social-political context.

**Outcome 4:** Identify important works of art and architecture from non-Western cultures and understand their significance within a social-political context.

## Children's Book Illustration Certificate

Division: Fine Arts

### Requirements

PROGRAM CODE: 2C37975

The **Children's Book Illustration Certificate** is designed to prepare advanced skill-level students to create content specifically in children's picture books. This certificate emphasizes book content development, processes and publishing methods. It also provides skills and strategies for students to develop their own original Intellectual properties. To fulfill the requirements in this certificate, the student must have first taken the prerequisites for all courses in the certificate, or by portfolio review by department instructors. Upon completion of the required courses the student must submit a finished, self-published children's book, for review and approval by three full-time faculty including: Head of the Illustration area, Art Department Chair, and another full-time faculty from the Illustration and DART programs. The book will be assessed against an industry standard preparing the student for the next stage of entering the profession. This certificate requires a total of 33-35 units. A minimum grade of C or better is required for each course taken in the certificate.

Code	Title	Units
<b>Required Courses (24 units):</b>		
ART 217 F	Children's Book Illustration (formerly ART 090DF)	3
ART 218 F	Visual Storytelling: Structure and Form	3
ART 220 F	Genre and Style in Entertainment Art	3
ART 222 F	Composition for Artists: Elements and Principles	3
ART 244 F	Illustration	3
ART 247 F	Sketching for Animators and Illustrators - Traditional Media Techniques	3
DART 140 F	Digital Publishing I	3
DART 148 F	Introduction to Narrative Illustration	3
<b>Restricted Electives: 9-11 units from the following list:</b>		<b>9-11</b>
ART 144 F	Fundamentals of Cartooning	2
ART 188 F	Beginning Watercolor Painting	3
ART 225 F	Illustrating Literature	3
ART 246 F	Advanced Illustration	3
DART 110 F	Fundamentals of Character Design	3
ENGL 239 F	Survey of Children's Literature	3
PRNT 101 F	Introduction to Printing	3
<b>Total Units</b>		<b>33-35</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate evidence of proficiency in a variety of creative areas, including sketching skills/rapid visualization, two-dimensional design and color, draftsmanship of accurate human anatomy, knowledge of digital illustration programs, and creative storytelling.

**Outcome 2:** Demonstrate an understanding of the expectations of the field of Children's Book Illustration, relating to interaction with peers and project leaders in a creative situation or environment.

## Illustration Certificate

### Requirements

PROGRAM CODE: 2C18742

The **Illustration Certificate Program** is designed to emphasize strategies and skill development in order to facilitate the student's portfolio presentation, which may be appropriate for a variety of careers in the Commercial Arts field, including editorial and advertising illustration, concept design and illustration for products, conceptual art for the game and entertainment industry, and illustration of the toy and theme park industries. This certificate requires a total of 33-36 units. A grade of C or better is required for each course taken.

Code	Title	Units
<b>Required Art Courses (21 units):</b>		
ART 120 F	Basic Design	3
ART 137 F	Basic Drawing for Entertainment Arts	3
or ART 182 F	Basic Drawing	
ART 157 F	Sketching for Animators and Illustrators	3
ART 180 F	Rendering	3
or ART 243 F	Applied Perspective	
ART 186 F	Beginning Life Drawing	3

ART 244 F	Illustration	3
ART 246 F	Advanced Illustration	3
<b>Required Digital Arts (DART) Courses (6 units):</b>		
DART 107 F	Digital Drawing	3
DART 135 F	Introduction to Digital Painting	3
<b>Restricted Electives - Select 6-9 units from the following list:</b>		<b>6-9</b>
ART 123 F	Business Practices in Art	3
ART 139 F	Fashion Sketching	2
ART 144 F	Fundamentals of Cartooning	2
ART 156 F	Animal Drawing	3
ART 181 F	Drawing from the Masters	3
ART 183 F	Representational Drawing	3
ART 188 F	Beginning Watercolor Painting	3
ART 189 F	Beginning Painting	3
ART 195 F	Anatomical Drawing	3
ART 290 F	Portfolio Preparation and Artwork Presentation	3
ART 294 F	Independent Study: Illustration	1-2
ART 298 F	Arts Internship	2-4
DART 148 F	Introduction to Narrative Illustration	3
<b>Total Units</b>		<b>33-36</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate evidence of proficiency in a variety of creative areas, including sketching skills/rapid visualization, two-dimensional design and color, and draftsmanship of accurate human anatomy and digital illustration programs

**Outcome 2:** Demonstrate an understanding of the expectations of the field of illustration, relating to interaction with peers and project leaders in a creative situation or environment.

## Museum Assistant Certificate

Division: Fine Arts

### Requirements

PROGRAM CODE: 2C39441

The **Museum Assistant Certificate** is designed to provide students with the entry-level skills for the growing global art market. This certificate is ideal for students seeking careers in art museums, galleries, or cultural centers as well as arts professionals who seek to upgrade their knowledge and improve their marketability. Students learn to prepare the walls, handle artwork safely, pack and ship artwork, hang artwork, light artwork appropriately, write and create labels and didactic materials, research and lay out an exhibition through hands-on experience. A grade of C or better is required in each course taken. This certificate requires 17-19 units.

Code	Title	Units
<b>Required Courses (14-16 units):</b>		
ART 115 F	The Museum Experience (formerly Museum Survey)	3
ART 122 F	Museum Studies - Introduction to Gallery Practices	3
ART 124 F	Museum Studies - Exhibition Production	3

ART 125 F	Museum Studies - Exhibition Design and Careers	3
ART 298 F	Arts Internship	2-4
<b>Restricted Electives - Material Culture Courses (3 units):</b>		<b>3</b>
ANTH 101 F	Physical Anthropology	3
	or ANTH 101HF Honors Physical Anthropology	
ANTH 103 F	Introduction to Archaeology	3
	or ANTH 103HF Honors Introduction to Archaeology	
ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	3
	or ANTH 107HF Honors Anthropology of Magic, Witchcraft and Religion	
ANTH 209 F	Cultures of Latin America	3
ART 112 F	Art History - Ancient to Medieval	3
ART 113 F	Art History - Renaissance to Modern	3
	or ART 113HF Honors Art History - Renaissance to Modern	
ART 114 F	Art History - Impressionism to Present	3
ART 116 F	Art History - The Art of Mexico	3
ART 117 F	Art History - American Art	3
ART 211 F	Women in the Arts	3
ART 212 F	Art History - The Art of Asia	3
ART 213 F	Art History: Pre-Columbian Art	3
ETHS 129 F	Introduction to African-American Studies	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
	or ETHS 153HF Honors Chicana-o and Latina-o Contemporary Issues	
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
<b>Total Units</b>		<b>17-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Prepare in-depth analysis of a museum exhibition, addressing concerns of layout, flow, use of color, educational materials including didactic panels and curatorial concept.

**Outcome 2:** Analyze, compare and contrast the theme and concept of selected exhibitions.

## Studio Arts Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A31520

The **Associate in Arts in Studio Arts for Transfer (AA-T)**, also called the Studio Arts AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Studio Art. Students earning the Studio Arts AA-T will be granted priority for admission as a Studio Arts major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 24 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. A P (Pass) grade is an



acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better. There are no additional graduation requirements. This degree is designed to prepare students to understand and appreciate various art forms and art media, and guide them in choosing an appropriate path for them to follow for the demonstration of their creativity. While a baccalaureate degree is recommended for a possible career in gallery and museum presentation, Art Criticism, Commercial Art, Art Education, and many other Art-related careers, completion of this curriculum will demonstrate commitment to the serious study of Art in practice and in theory, and provide comprehensive preparation for upper-division work. The Studio Arts AA-T Degree program requires 24 total units of which 12 units are in required core courses. In addition, a total of 12 units are required from a list of restricted electives: 3 units in restricted electives required in Art History, and 9 units from a list of Studio Arts restricted elective courses.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (12 Units):</b>		
ART 113 F	Art History - Renaissance to Modern	3
ART 120 F	Basic Design	3
ART 121 F	Three-Dimensional Design	3
ART 182 F	Basic Drawing	3
<b>List A: Art History Restricted Electives (3 units):</b>		
ART 112 F	Art History - Ancient to Medieval	3
ART 117 F	Art History - American Art	3
ART 212 F	Art History - The Art of Asia	3
<b>List B: Studio Arts Restricted Electives (9 units):</b>		
ART 186 F	Beginning Life Drawing	3
ART 189 F	Beginning Painting	3
ART 131 F	Introduction to Printmaking	3
ART 153 F	Ceramics - Beginning Handbuilding (formerly ART 150AF)	3
ART 160 F	Fundamentals of Sculpture	3
ART 118 F	Color Theory	3
ART 173 F	Jewelry Casting	3
DART 100 F	Introduction to Digital Art	3
DART 170 F	Digital Photo Editing I	3
<b>Total Units</b>		<b>24</b>

## Program Student Learning Outcomes

**Outcome 1:** Analyze and arrange visual components according to recognized design standards.

**Outcome 2:** Create work in two-dimensions and three-dimensions in a variety of different disciplines and media.

**Outcome 3:** Recognize artworks of ancient and/or modern Art History and demonstrate an understanding of their significance within a social-political context.

## Art - Digital Arts

Division: Fine Arts

### Faculty

Phil Dimitriadis  
Frank Guthrie  
Michael Sheehan

### Degrees and Certificates

3D Animation Skills Certificate Level II (p. 238)  
Computer Animation Multi Media Certificate (p. 238)  
Computer Graphics Certificate (p. 239)  
Digital Publication Certificate (p. 239)  
Entertainment Arts Certificate (p. 240)

### Courses

**DART 100 F Introduction to Digital Art** **3 Units**  
36 hours lecture and 54 hours lab per term. This course teaches the fundamentals of digital media to input, create, manipulate and output a variety of images. Students learn basic skills and use a varied selection of visual arts software, while gaining insights into the basic principles of digital computers and digital graphics. Extensive hands-on use of computers and other hardware allows students to build a portfolio and acquire the experience levels necessary to advance in this field. (CSU) (Degree Credit)

**DART 101 F Photoshop for Digital Arts** **3 Units**  
36 hours and 54 hours lab per term. This course teaches the fundamentals of Adobe Photoshop to input, create, manipulate and output a variety of images. Students learn basic design skills and usage of the Adobe Photoshop, while gaining insights into the basic principles of digital manipulation and graphics. Extensive hands-on use of computers and other hardware allow students to build a portfolio and acquire the experience levels necessary to advance in this field. (CSU) (Degree Credit)

**DART 102 F Introduction to Web Graphics** **3 Units**  
36 hours and 54 hours lab per term. This course is a study of page development, navigation, graphics, animation, video, and sounds media for use on the Internet. During the course of the semester, the student builds an assigned website and a personal website. This course is intended as a gateway to a web certificate. Students can pursue additional in-depth study on the topic(s) that most attracted them during the semester. (CSU) (Degree Credit)

**DART 103 F Practical Color Techniques for Digital Media 2 Units****Prerequisite(s):** ART 118 F with a grade of C or better.

18 hours lecture and 54 hours lab per term. This course teaches the practical side of color theory concepts, from creating and outputting color images to using color-corrections to recreate the digital file. Students learn to apply their color knowledge using extensive hands-on, real-world examples, allowing students to acquire the experience levels necessary to advance in this field. (CSU) (Degree Credit)

**DART 104 F Introduction to Maya 3D 3 Units****Advisory:** DART 100 F

36 hours lecture and 54 hours lab per term. This course will introduce the Autodesk Maya 3D computer software, focusing upon polygonal modeling techniques. Students will combine modeling techniques with critical thinking assignments to design models for the entertainment industry. Students will also focus on learning design fundamentals by creating thumbnails, and silhouette sketching to aid in their design solutions. (CSU) (Degree Credit)

**DART 105 F Fundamentals of Digital Media Design 3 Units****Advisory:** DART 100 F

36 hours lecture and 54 hours lab per term. This course introduces basic digital design concepts in the development of solutions to design problems. Topics include the design theory, drawing, color theory, typography, illustration, animation, layout techniques, vocabulary, and knowledge of appropriate digital media output formats. Final output may integrate additional media such as animation, sound, text, and video. (CSU) (Degree Credit)

**DART 106 F Intermediate Maya 3 Units****Prerequisite(s):** DART 104 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course gives the student an introduction to the intermediate use of Maya, a 3D digital program used within the entertainment/game industry to create 3D visual effects. Students will continue forward with basics learned in DART 104 F and expand their knowledge of modeling, texturing and lighting. Class assignments will cover more complex models, environments, and vehicle creations. Students will start building a portfolio of finished assignments that cover a wide range of the entertainment industry; for game design, animation and the film industry. (CSU) (Degree Credit)

**DART 107 F Digital Drawing 3 Units****Advisory:** ART 182 F and DART 100 F.

36 hours lecture and 54 hours lab per term. This course encompasses the use of digital-based software applications combined with digital drawing tablets and touch sensitive digital monitors. This course also prepares the student to meet industry standards and requirements for working digitally inside entertainment art production companies. (CSU) (Degree Credit)

**DART 108 F Digital Drawing - Dynamic Sketching 3 Units****Prerequisite(s):** DART 107 with a grade of C or better**Advisory:** DART 100 F and ART 243 F and ART 182 F

36 hours lecture and 54 hours lab per term. This course is an accelerated digital drawing class applying in-depth acquisition of skill and technique demonstrated in digital drawing. This course covers essentials of draftsmanship combined with digital drawing applications Sketch Book Pro and Photoshop to conceptualize ideas from script. Emphasis on problem-solving skills, and abilities associated with designing from script, to finished conceptual sketch. Focus is on the design process of translating ideation to finished projects, developed sketching for animators, illustrators and entertainment game designers. (CSU) (Degree Credit)

**DART 109 F Environmental Sketching 3 Units****Prerequisite(s):** ART 182 F with a grade of C or better**Advisory:** DART 107 F and ART 243 F

36 hours lecture and 54 hours lab per term. This course is an ideal foundation course for the art student wanting to learn sketching techniques used for creating and strengthening environmental sketching abilities. Foundation study will focus on designing while using perspective to create thumbnails and quick sketch visualizations. Students will be exposed to the steps required to take an idea from script, to thumbnail, to rough, to finished design. This is an ideal foundational class for the student wanting to pursue a career as a concept artist or digital painter inside entertainment. (CSU) (Degree Credit)

**DART 110 F Fundamentals of Character Design 3 Units****Prerequisite(s):** ART 182 F with a grade of C or better**Advisory:** DART 107 F and DART 135 F and ART 243 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to the basics of character design encompassing techniques and skills used within the creation of character development. Classroom exercises will focus on combining design principles, with perspective fundamentals to create characters for use within the fields of entertainment and commercial art. (CSU) (Degree Credit)

**DART 111 F Character Design 3 Units****Prerequisite(s):** DART 110 F with a grade of C or better**Advisory:** DART 107 F and DART 135 F and ART 243 F.

36 hours lecture and 54 hours lab per term. This course is designed to move the student from the basics learned inside DART 110 F and introduce them to more complex character development encompassing the fields of animation and game design. (CSU) (Degree Credit)

**DART 112 F Vector Graphics 3 Units****Advisory:** DART 100 F.

36 hours lecture and 54 hours lab per term. This is a course that encompasses a basic study of digital tools to make vector-based visual art intended for publication. This course involves extensive hands-on use of the computer to build a portfolio and acquire the experience levels demanded by employers and clients. (CSU) (Degree Credit)

**DART 115 F Introduction to Prop Design (formerly ART 090AF) 3 Units****Prerequisite(s):** ART 182 F with a grade of C or better**Advisory:** ART 243 F and DART 107 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to designing props. Props are objects that are used by a character during animation or gameplay. These objects consist of weaponry, vehicles, digital devices, military elements and portable objects. A prop designer is also responsible for incorporating the historical and mechanical significance of a show into the design process. Prop Design is an essential part of animation and game production, and is an entry-level position for students who want to start working in the entertainment industry. (CSU) (Degree Credit)

**DART 119 F Interior Sketching 3 Units****Prerequisite(s):** ART 182 F with a grade of C or better**Advisory:** DART 107 F and DART 109 F and ART 243 F

36 hours lecture and 54 hours lab per term. This course is an ideal follow-up course to DART 109 F, focusing on sketching techniques used for creating and strengthening interior environment sketching abilities. Interior sketching is used in the pre-production and production phase of development for game/animation/film production focusing on scene development, background design and level design. Students are advised to have a solid background in either perspective, pictorial illustration, or exterior sketching before taking this course. (CSU) (Degree Credit)

- DART 120 F 3D Modeling 3 Units**  
**Prerequisite(s):** DART 104 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an intermediate modeling course focusing on more advanced 3D modeling assignments encompassing vehicle design, organic modeling, set development, and staging. The Autodesk Software application, Maya, will be used to demonstrate polygonal, nurb, and sub-division surface modeling techniques. (CSU) (Degree Credit)
- DART 121 F Futuristic Vehicle Design (formerly ACG 120 F) 3 Units**  
**Prerequisite(s):** DART 104 F with a grade of C or better  
**Advisory:** DART 106 F and DART 135 F and ART 182 F and ART 243 F  
 36 hours lecture and 54 hours lab per term. This is an intermediate modeling course focusing on specific techniques and design theories for designing futuristic vehicles. Students will work from a traditional conceptual approach of thumbnails and rough sketches to create a final design that can then be modeled in the Maya 3D software application. (CSU) (Degree Credit)
- DART 123 F Introduction to 3D Texturing 3 Units**  
**Prerequisite(s):** DART 100 F and DART 104 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an introduction course to 3D texturing using Adobe Photoshop and Allegorithmic's Substance Painter as the texturing software and Autodesk's Maya to preview and render images. The students will learn the terminology, research and digitally paint textures such as color, displacements, bumpiness and specularly, on 3D models used for animation, film, video games and consumer product. (CSU) (Degree Credit)
- DART 124 F 3D Texturing for Organic Characters 3 Units**  
**Prerequisite(s):** DART 104 F and DART 123 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an intermediate class on 3D texturing organic models using Allegorithmic's Substance Painter. The student will continue forward with 3D texturing use Substance Painter, focusing on expanded skills with set assignments, concentrating on texturing organic models. The students will learn how to create HDRI images for lighting, research and digitally recreate textures for humanoids and creatures used for animation, film, video games and consumer product. (CSU) (Degree Credit)
- DART 125 F 3D Texturing for Hard Surface Modeling 3 Units**  
**Prerequisite(s):** DART 104 F and DART 123 F with a grade of C or better  
 36 hours lecture and 54 hours lab per term. This is an intermediate class on 3D texturing hard surface models using Allegorithmic's Substance Painter. The student will continue forward with 3D texturing using Substance Painter, focusing on expanded skills with set assignments, concentrating on texturing hard surface 3D model. The students will learn how to create HDRI images for lighting, research and digitally recreate textures for props and sets used for animation, film, video games and consumer product. (CSU) (Degree Credit)
- DART 132 F Digital Imaging I 3 Units**  
 36 hours lecture and 54 hours lab per term. This course instructs students to make and edit images using photo-editing and other raster graphics programs. Raster graphics is the technology of choice for continuous-tone artwork suitable for traditional print formats as well as newer electronic media such as web pages on the internet. Visually, raster images are often characterized by a photographic or painterly appearance. These programs are less appropriate for stylized, hard-edge material. This course covers leading photo-editing and manipulation software, with plenty of hands-on use of the computer to build a portfolio and acquire the experience levels demanded by employers and clients. (CSU) (Degree Credit)
- DART 133 F Marvelous Design I - Introduction to Cloth Simulation 3 Units**  
 36 hours lecture and 54 hours lab per term. This course is an introduction to cloth simulation using Marvelous Designer, one of the leading software used to create digital clothing simulations in the fashion, video game, engineering, science and entertainment industries that mimic the real-world properties of fabrics. Students learn to design and model digital clothing simulations using traditional pattern-making techniques such as sewing and stitching to acquire the experience levels necessary to advance in their chosen field. (CSU) (Degree Credit)
- DART 134 F Marvelous Designer II: Production Techniques 3 Units**  
**Prerequisite(s):** DART 133 F with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This is an advanced level cloth simulation course using Marvelous Designer, one of the leading software in this field that mimics the real-world properties of fabrics. Students learn to design and model production-driven digital cloth simulations based on traditional pattern-making techniques such as sewing and stitching to acquire the experience levels necessary to advance in the fashion, video game, engineering, science and entertainment industries. (CSU) (Degree Credit)
- DART 135 F Introduction to Digital Painting 3 Units**  
**Advisory:** ART 182 F and DART 100 F.  
 36 hours lecture and 54 hours lab per term. This course will introduce the student to the Photoshop software application, the most commonly used application for digital painting within the entertainment industry. This course will focus on digital painting techniques within the Photoshop software application, and how it applies towards creating digital artwork. (CSU) (Digital Credit)
- DART 136 F Intermediate Digital Painting 3 Units**  
**Prerequisite(s):** DART 135 F with a grade of C or better  
**Advisory:** DART 107 F and ART 243 F  
 36 hours lecture and 54 hours lab per term. This course continues forward painting with the Photoshop digital application focusing on expanded skill set assignments with emphasis on vehicle design, character creation and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)
- DART 137 F Advanced Digital Painting 3 Units**  
**Prerequisite(s):** DART 136 F with a grade of C or better  
**Advisory:** DART 107 F and DART 108 F and ART 243 F  
 36 hours lecture and 54 hours lab per term. This course is based upon increasing a mastery of digital painting technique using the Photoshop application to create vehicle design, character creation, and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)
- DART 138 F Digital Painting for Production 3 Units**  
**Prerequisite(s):** DART 107 F pr DART 136 with a grade of C or better.  
**Advisory:** ART 243 F  
 36 hours lecture and 54 hours lab per term. This course will introduce the student to working and delivering production level artwork, adhering to industry standard in entertainment production. Students will be painting with the Photoshop digital application, focusing on advanced level assignments prepared by industry professionals. Assignments will focus upon MAYA digital render paint-overs, vehicle design, character creation, and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)

- DART 140 F Digital Publishing I** **3 Units**  
36 hours lecture and 54 hours lab per term. This course focuses on the use of computers as a design aid to generate "camera ready" page layouts, integrating graphics and text. Emphasis is on design of the page, use of the computer programs, and printing skills required for a finished product. Open lab work may be required to complete assignments. (CSU) (Degree Credit).
- DART 146 F Digital Publishing II** **3 Units**  
36 hours lecture and 54 hours lab per term. This course focuses on the use of advanced options of industry standard software as a design aid to generate "camera ready" page layouts. Emphasis is on developing experience in varied types and sizes of commercial projects. Open lab work may be required for completing assignments. (CSU) (Degree Credit)
- DART 148 F Introduction to Narrative Illustration** **3 Units**  
**Prerequisite(s):** ART 137 F or ART 182 F, with a grade of C or better.  
**Advisory:** ART 243 F and DART 107 F and DART 135 F.  
36 hours lecture and 54 hours lab per term. This course is designed to introduce the student to narrative illustration concepts incorporating traditional draftsmanship skill sets, combined with entertainment design skill sets, and digital software to produce narrative story illustrations for entertainment, animation, and storytelling careers. (CSU) (Degree Credit)
- DART 150 F 3D Computer Animation** **3 Units**  
**Prerequisite(s):** DART 104 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course is an intermediate study of the animation sub-menu tab in the Maya 3D software application. This course will focus on introducing the student to basics of 3D computer animation. The Maya software is commonly used within film, game and animation industries for creating animations, and special effects. (CSU) (Degree Credit)
- DART 151 F Introduction to Character Animation and Rigging** **3 Units**  
**Prerequisite(s):** DART 104 F and DART 150 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This is an introductory course in rigging and animation, focusing in the movement of characters in 3D space using Autodesk's Maya, the leading software in the entertainment industry. The student will learn how to implement rigs and execute animation of characters in a 3D environment, interpreting the 12 Principles of Animation in the performance of their character's movements. Final animation renders will integrate additional media such as sound, to be used in a variety of visual media, from films, television, consumer products to video games. (CSU) (Degree Credit)
- DART 152 F Pre Visual Animation (formerly ACG 150 F)** **3 Units**  
**Prerequisite(s):** DART 104 F and DART 150 F with a grade of C or better.  
**Advisory:** ART 215 F  
36 hours lecture and 54 hours lab per term. This course is an intermediate study in animation, focusing upon pre visual camera animation. Animating cameras and setting up scenes for pre visual animation requires an education in cinematography, story boarding, and timing. Pre visual animation has become a new position within the entertainment industry providing early solutions for games, movies, special effects, and television commercial productions. (CSU) (Degree Credit)
- DART 153 F Introduction to Digital Sculpting with ZBrush** **3 Units**  
**Advisory:** DART 100 F and DART 104 F  
36 hours lecture and 54 hours lab per term. This is an introductory course in digital sculpting introducing the student to the Pixologic ZBrush 3D Digital Sculpting application. The ZBrush application can simulate traditional sculpting in clay to create high resolution digital sculpted models, and images for film, game, and animation productions. (CSU) (Degree Credit)
- DART 154 F Creature Sculpting with ZBrush** **3 Units**  
**Prerequisite(s):** DART 153 F with a grade of C or better  
**Advisory:** DART 100 F and DART 104 F.  
36 hours lecture and 54 hours lab per term. This is an intermediate course in digital sculpting concentrating in Human and Creature Anatomy using Pixologic's ZBrush, a 3D digital sculpting software. ZBrush simulates traditional clay sculpting digitally, creating high-resolution models, which can then be rendered into images or models for the entertainment, consumer product and manufacturing industries. (CSU) (Degree Credit)
- DART 155 F Hard Surface Sculpting with ZBrush** **3 Units**  
**Prerequisite(s):** DART 153 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This is an intermediate course in digital sculpting concentrating in Hard Surface Digital Sculpting using Pixologic's ZBrush, a 3D Digital Sculpting application. ZBrush simulates traditional clay sculpting digitally, creating high-resolution models, which can then be rendered into images or models for the entertainment, consumer product and manufacturing industries. (CSU) (Degree Credit)
- DART 156 F 3D Printing Techniques with ZBrush** **3 Units**  
**Prerequisite(s):** DART 153 F with a grade of C or better.  
**Advisory:** DART 100 F and DART 104 F.  
36 hours lecture and 54 hours lab per term. This is an intermediate course in digital sculpting concentrating in using Pixologic's ZBrush, a 3D Digital Sculpting application, for 3D printing. ZBrush simulates traditional clay sculpting digitally, creating high-resolution models, which can then be exported to all types of Additive Process 3D printers to generate physical models for the entertainment, consumer product and manufacturing industries. (CSU) (Degree Credit)
- DART 157 F Introduction to 3D Printing and Fabrication** **3 Units**  
36 hours lecture and 54 hours lab per term. In this course, students will explore the different additive manufacturing processes of 3D printing, from 3D digital file manipulations using Autodesk's MeshMixer, file slicing and output for the creation of physical models, their refinement and presentation using traditional methods to create a finish piece for the entertainment, consumer product, medical/biotech, automotive and manufacturing industries. (CSU) (Degree Credit)
- DART 158 F Fusion 360 I - Introduction to Product Design** **3 Units**  
36 hours lecture and 54 hours lab per term. This course introduces students to the basics of computer-aided design, engineering, and manufacturing using Fusion 360 to create product design for the entertainment, transportation, medical and manufacturing industries. From sketching, drafting, modeling, simulations, animation and rendering, the students learn Fusion 360 based on extensive real-world examples, allowing them to acquire the experience levels necessary to advance in their chosen fields. (CSU) (Degree Credit)
- DART 159 F Fusion 360 II: Product Design Production Techniques** **3 Units**  
**Prerequisite(s):** DART 158 F with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course introduces students to advanced product design and production techniques using Fusion 360 to create products for the entertainment, transportation, medical and manufacturing industries. From sketching, drafting, modeling, simulations, animation and rendering, the students learn advanced product design production techniques based on extensive real-world examples, allowing them to acquire the experience levels necessary to advance in their chosen fields. (CSU) (Degree Credit)

**DART 161 F Body Dynamic for Character Animation with Maya 3 Units**

**Prerequisite(s):** DART 150 F and DART 151 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This is an intermediate course in character rigging and animation, focusing in body dynamics. In this class, students will continue to implement the movement-mechanics of characters in 3D space, in order to explore more in depth the action of forces to the body, forces such as gravity and weight, which are the foundations of the 12 Principles of Animation. Final animation renders will integrate additional media such as lighting and texturing, to be used in a variety of visual media, from films, television, consumer products to video games. (CSU) (Degree Credit)

**DART 162 F 2D Computer Animation 3 Units**

36 hours lecture and 54 hours lab per term. This course is a study of digital tools to represent moving objects in 2D space. Students will learn how to create 2D computer animation. Final output may integrate additional media (sound, text, graphics, and video), and find distribution as CD-ROMs, webpages, complete websites, videos, cartoons, animated shorts, games, education, instructional training, and creative self-expression. (CSU) (Degree Credit)

**DART 164 F Interactive Multimedia Design 3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on designing interactive multimedia presentations by integrating a variety of programs and media (sound, text, graphics and video). Final output may take the form of DVDs, CD-ROMs, websites, videos, cartoons, animated shorts, games, educational software and creative self-expression. Open lab work may be required to complete assignments. (CSU) (Degree Credit)

**DART 170 F Digital Photo Editing I 3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on digital photography and the appropriate level usage of software for the manipulation of raster images for the development of fine art and photographic images appropriate for advertising design. Digital cameras, scanners, photo CDs, and video images provide the basis for image manipulation pushing to the extreme of digital photography. Course topics include camera selection, image enhancement, editing, compositing, retouching, photomontages, pre-press, color management, photo printing, color separations and service bureaus. (CSU) (Degree Credit)

**DART 171 F Facial Acting for Character Animation with Maya 3 Units**

**Prerequisite(s):** DART 151 F and DART 161 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course further develops the student's knowledge on the creation of rigs and animation-techniques for a character's acting, based on live-action recordings and the implementation of the 12 principles of Animation. The student will learn how to analyze video references, how to act, record and utilize their own footage as a guide for the rigging and animation of specific shops, concentrating on the acting of 3D characters in 3D environments to be used in a variety of visual media, from films, television, consumer products to video games. (CSU) (Degree Credit)

**DART 172 F Digital Image Editing II 3 Units**

**Advisory:** DART 170 F  
36 hours lecture and 54 hours lab per term. This course focuses on getting a good digital image and editing digital imagery and the usage of software for the manipulation of raster images for the development of fine art and photographic images appropriate for advertising design and digital media and art. Digital cameras, scanners, photo CDs, and video images provide the basis for image manipulation pushing to the extreme of digital photography. Course topics include equipment choices, image enhancement, editing, compositing, retouching, photomontages, pre-press, color management, photo printing, color separations and service bureaus and methods of delivery. (CSU) (Degree Credit)

**DART 180 F Digital Video 3 Units**

36 hours lecture and 54 hours lab per term. This course is an examination of digital video editing techniques including the professional manipulation of sound and beginning motion graphics and compression techniques. This course includes the study and hands-on use of computers, assorted software, SDHC card-based digital video cameras, and other tools and techniques used for digitizing, editing and composition of video and audio sources. This course provides an in-depth exploration of digital video as used in the fields of multimedia, video/film, websites, DVD/Blu Ray disk creation, museum installations and video for cellular and mobile devices. (CSU) (Degree Credit)

**DART 181 F Advanced Digital Video 3 Units**

**Advisory:** DART 180 F  
36 hours lecture and 54 hours lab per term. This course builds on the basic editing skills learned in DART 180 F. This course is an examination of intermediate to advanced digital video editing techniques including the professional manipulation of sound. Video distribution includes multimedia video, online and offline video editing, interactive video inclusive websites, DVD/Blu Ray disk creation, video for cellular and mobile devices. (CSU) (Degree Credit)

**DART 182 F Motion Graphics and Special Effects 3 Units**

**Advisory:** DART 180 F or two years experience with contemporary editing and compositing software or one year of professional industry experience in editing and/or motion graphics  
36 hours lecture and 54 hours lab per term. This course builds on the basic editing skills learned in DART 180 F. This course is an introduction to motion graphics, digital composition, sound design and special effects for multimedia, 2D, 3D space digital video, installations and mobile devices. (CSU) (Degree Credit)

**DART 195 F Production Design for Entertainment - Eastern Civilizations 3 Units**

**Prerequisite(s):** DART 109 F with a grade of C or better  
**Advisory:** ART 243 F and DART 107 F and DART 135 F  
36 hours lecture and 54 hours lab per term. This course will introduce the student to environmental-production design techniques for entertainment focusing on the architectural development of Eastern civilizations, and their influence upon production-design for film, games, and animation. (CSU) (Degree Credit)

**DART 196 F Production Design for Entertainment: Western Civilizations 3 Units**

**Prerequisite(s):** DART 109 F with a grade of C or better  
**Advisory:** ART 243 F and DART 107 F and DART 135 F  
36 hours lecture and 54 hours lab per term. This course will introduce the student to environmental-production design techniques for entertainment focusing on the architectural development of Western civilizations, and their influence upon production design for film, games and animation. (CSU) (Degree Credit)

**DART 197 F Production Design for Entertainment - Early Science Fiction 3 Units**

**Prerequisite(s):** DART 109 F with a grade of C or better  
**Advisory:** ART 243 F and DART 107 F and DART 135 F  
36 hours lecture and 54 hours lab per term. This course will introduce the student to "environment-production" design techniques for entertainment focusing inside the history of early science fiction. Students will examine the historical architecture used within the development of the early science fiction genre relating towards film, games, and animation. (CSU) (Degree Credit)

**DART 198 F Production Design for Entertainment: Late Science Fiction**  
3 Units**Prerequisite(s):** DART 109 F with a grade of C or better**Advisory:** ART 243 F and DART 107 F and DART 135 F

36 hours lecture and 54 hours lab per term. This course will introduce the student to "environmental-production" design techniques for entertainment focusing inside the history of late science fiction. Students will examine the historical architecture used within the development of the late science fiction genre relating towards film, games, and animation. (CSU) (Degree Credit)

## 3D Animation Skills Certificate - Level II

Division: Fine Arts

### Requirements

**PROGRAM CODE:** 2C00065

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **3D Animation Skills Certificate - Level II** is a continuation of the Computer Graphics Certificate with emphasis in 3D animation software. This certificate provides the skill set required for entry-level employment in the 3-D animation and modeling industry. The program requires a total of 15 units of which 9 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below. Units earned from the Computer Graphics Certificate may not be used for the Level II certificate. Any advanced DART course may replace the introductory course DART 104 F if this course was completed as part of the Computer Graphics Certificate.

Code	Title	Units
<b>Required Courses (9 units):</b>		
DART 104 F	Introduction to Maya 3D	3
DART 120 F	3D Modeling	3
DART 150 F	3D Computer Animation	3
<b>Restricted Electives (6 units):</b>		
ART 120 F	Basic Design	3
ART 121 F	Three-Dimensional Design	3
ART 182 F	Basic Drawing	3
ART 186 F	Beginning Life Drawing	3
<b>Total Units</b>		<b>15</b>

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic competence in selected image-making techniques.

**Outcome 2:** Devise solutions to 3D design problems using digital media tools.

**Outcome 3:** Devise solutions to 3D modeling problems using digital media tools, and be able to demonstrate basic competence in the use of computer hardware and software for 3D modeling.

## Computer Animation/Multi Media Certificate

### Requirements

**PROGRAM CODE:** 2C10610

The **Computer Animation/Multi Media Certificate Program** provides the skills necessary to create animated and/or interactive projects for distribution on a variety of media, including DVD, web pages, videotape, and CD-ROM. This certificate requires a total of 30-32 units of which 20 units are in required courses, and an additional 10-12 units must be chosen from the restricted electives listed below. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Select one of the Introduction classes</b>		
Select one of the following:		
DART 100 F	Introduction to Digital Art	3
DART 102 F	Introduction to Web Graphics	3
DART 104 F	Introduction to Maya 3D	3
DART 106 F	Intermediate Maya	3
<b>Required Art Introduction Class</b>		
ART 118 F or ART 120 F	Color Theory Basic Design	3
<b>Required Advanced Courses</b>		
ART 144 F	Fundamentals of Cartooning	2
DART 120 F	3D Modeling	3
DART 150 F	3D Computer Animation	3
DART 162 F	2D Computer Animation	3
DART 164 F	Interactive Multimedia Design	3
<b>Restricted Electives</b>		
Select 10-12 units from the following:		10-12
ART 123 F	Business Practices in Art	3
ART 180 F	Rendering	3
ART 182 F	Basic Drawing	3
ART 299 F	Art Independent Study	1-2
DART 112 F	Vector Graphics	3
DART 132 F	Digital Imaging I	3
DART 140 F	Digital Publishing I	3
DART 146 F	Digital Publishing II	3
DART 170 F	Digital Photo Editing I	3
DART 180 F	Digital Video	3
MUS 124 F	Recording Lab I - Beginning Techniques	3
CRTV 150 F	Television Studio Production	3
CRTV 245AF	Digital Editing, Graphics and Effects	3
<b>Total Units</b>		<b>30-32</b>

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic competence in selected image-making techniques.

**Outcome 2:** Apply the terminology of computer graphics to communications within the field of digital media.

**Outcome 3:** Devise solutions to gain an understanding of computer technology vital to web designers.

**Outcome 4:** Devise solutions to visual problems using principles of form, design, and color.

**Outcome 5:** Create projects that demonstrate specialized knowledge of 2D computer animation and multi-media projects from initial design concept through project completion that clearly illustrates the student's solutions.

**Outcome 6:** Create effective documents by effectively using the concepts of design, such as: color, style, typography and composition.

## Computer Graphics Certificate

### Requirements

PROGRAM CODE: 2C10609

The **Computer Graphics Certificate** provides the skills necessary to create digital drawings, paintings and illustrations, building a portfolio representative of the student's artistic talents and technical proficiency. This certificate is designed to help students find employment in occupations that desire entry-level skills in computer-aided art and design. This certificate program requires the completion of 28-30 units of which 24 units are in required courses. An additional 4-6 units must be chosen from the restricted electives listed below. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Computer Graphics Introduction Class - select from the following (3 units):</b>		
DART 100 F	Introduction to Digital Art	3
DART 102 F	Introduction to Web Graphics	3
DART 104 F	Introduction to Maya 3D	3
DART 106 F	Intermediate Maya	3
DART 108 F	Digital Drawing - Dynamic Sketching	3
<b>Required Art Introduction Class - select from the following (3 units):</b>		
ART 118 F	Color Theory	3
ART 120 F	Basic Design	3
<b>Required Advanced Classes (12 units):</b>		
ART 182 F	Basic Drawing	3
DART 112 F	Vector Graphics	3
DART 132 F	Digital Imaging I	3
DART 140 F	Digital Publishing I	3
<b>Required Additional Computer Graphics Classes - Select from the following (6 units):</b>		
DART 146 F	Digital Publishing II	3
DART 170 F	Digital Photo Editing I	3
<b>Restricted Electives (4-6 units):</b>		
ART 123 F	Business Practices in Art	3
ART 145 F	Publication Design	3
ART 146 F	Advertising Design	3
ART 147 F	Graphic Design II (formerly Production Techniques for Graphic Designers)	3
ART 180 F	Rendering	3
ART 299 F	Art Independent Study	1-2

DART 120 F	3D Modeling	3
DART 150 F	3D Computer Animation	3
DART 162 F	2D Computer Animation	3
DART 164 F	Interactive Multimedia Design	3
DART 180 F	Digital Video	3
PRNT 101 F	Introduction to Printing	3

**Total Units** **28-30**

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic competence in selected image-making techniques.

**Outcome 2:** Apply the terminology of computer graphics to communications within the field of digital media.

**Outcome 3:** Create effective documents by effectively using the concepts of design, such as: color, style, typography and composition.

**Outcome 4:** Create projects that demonstrate specialized knowledge of 2D computer animation and multi-media projects from initial design concept through project completion that clearly illustrates the student's solutions.

## Digital Publication Certificate

### Requirements

PROGRAM CODE: 2C10611A

The **Digital Publication Certificate (formerly Desktop Publishing Certificate)** is designed to teach publication design, building a portfolio representative of the student's artistic talents and technical proficiency. This certificate positions a student to seek and obtain employment in the fields of Advertisement and Graphic Design. This certificate requires a total of 26-30 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (15 units):</b>		
ART 145 F	Publication Design	3
DART 112 F	Vector Graphics	3
DART 132 F	Digital Imaging I	3
DART 140 F	Digital Publishing I	3
DART 146 F	Digital Publishing II	3
<b>Restricted Electives - Art and Printing courses (6 units):</b>		
ART 120 F	Basic Design	3
ART 141 F	Typography	3
PRNT 101 F	Introduction to Printing	3
<b>Restricted Electives - Computer Graphics introduction course (3 units):</b>		
DART 100 F	Introduction to Digital Art	3
DART 102 F	Introduction to Web Graphics	3
DART 104 F	Introduction to Maya 3D	3
DART 108 F	Digital Drawing - Dynamic Sketching	3
<b>Restricted Electives - Choose any course not taken in the previous categories, or any course from the list below (2-6 units):</b>		
ART 118 F	Color Theory	3
ART 120 F	Basic Design	3
ART 123 F	Business Practices in Art	3

ART 141 F	Typography	3
ART 146 F	Advertising Design	3
ART 147 F	Graphic Design II (formerly Production Techniques for Graphic Designers)	3
ART 148 F	Packaging Design	3
ART 180 F	Rendering	3
ART 182 F	Basic Drawing	3
DART 120 F	3D Modeling	3
DART 150 F	3D Computer Animation	3
DART 162 F	2D Computer Animation	3
DART 164 F	Interactive Multimedia Design	3
DART 170 F	Digital Photo Editing I	3
DART 180 F	Digital Video	3
PRNT 060 F	Basic Digital Printing (formerly PRNT 070 F)	2
PRNT 075 F	Electronic Prepress I	6
PRNT 101 F	Introduction to Printing	3
<b>Total Units</b>		<b>26-30</b>

## Program Student Learning Outcomes

**Outcome 1:** Apply the terminology of computer graphics to communications within the field of digital media.

**Outcome 2:** Demonstrate basic use of computer graphics software and hardware.

**Outcome 3:** Devise solutions to gain an understanding of computer technology vital to web designers.

**Outcome 4:** Develop digital artwork that clearly illustrates the student's solutions.

**Outcome 5:** Evaluate digital media tools for their suitability to different areas of visual communications.

**Outcome 6:** Create a new document incorporating text and images, using page layout software.

## Entertainment Arts Certificate

Division: Fine Arts

### Requirements

PROGRAM CODE: 2C36692

The **Entertainment Arts Certificate** is designed to prepare students for an entry level position in the fields of entertainment encompassing animation and game design. The Entertainment Arts Certificate requires a total of 45 units, of which 15 are required courses in art and 27 are required courses in digital art emphasizing entertainment production techniques. An additional 3 units may be chosen from the restricted electives. A grade of C or better is required for each course taken. Upon completion of the required courses the student must submit a final professional level portfolio for review and approval by three full-time faculty including: Head of the Digital Art Department, Art Department Chair, and another full-time faculty from the ART or DART department. The portfolio will be assessed against an industry standard preparing the student for entry-level work inside the fields of entertainment.

Code	Title	Units
<b>Required Art Courses (15 units):</b>		<b>15</b>
ART 180 F	Rendering	3
ART 181 F	Drawing from the Masters	3
or ART 195 F	Anatomical Drawing	
ART 186 F	Beginning Life Drawing	3
ART 243 F	Applied Perspective	3
ART 290 F	Portfolio Preparation and Artwork Presentation	3
<b>Required Digital Art Courses (27 units):</b>		<b>27</b>
DART 104 F	Introduction to Maya 3D	3
DART 107 F	Digital Drawing	3
DART 108 F	Digital Drawing - Dynamic Sketching	3
DART 109 F	Environmental Sketching	3
DART 110 F	Fundamentals of Character Design	3
DART 111 F	Character Design	3
DART 115 F	Introduction to Prop Design (formerly ART 090AF)	3
DART 135 F	Introduction to Digital Painting	3
DART 136 F	Intermediate Digital Painting	3
<b>Restricted Electives (3 units):</b>		<b>3</b>
ART 123 F	Business Practices in Art	3
ART 157 F	Sketching for Animators and Illustrators	3
ART 215 F	Beginning Storyboarding and Narrative Composition (formerly ART 090BF)	3
ART 244 F	Illustration	3
<b>Total Units</b>		<b>45</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate evidence of proficiency in problem solving techniques and devise solutions for designs presented from scripted assignments while using digital software applications.

**Outcome 2:** Demonstrate an expanded in-depth knowledge of traditional drawing/sketching techniques for rapid visualization and be able to translate those techniques into a digital format using various digital software applications.

**Outcome 3:** Demonstrate the ability to effectively display their step by step solutions, and finished final work in a professional portfolio presentation adhering to an industry standard.



# Automotive Technology

Division: Technology and Engineering

## Faculty

John Farley  
David Lopez  
Robert Maine  
Jose V. Miranda  
Charles Zepeda

## Degrees and Certificates

- Automatic Transmission Specialist Certificate (p. 242)
- Automotive Chassis Specialist Certificate (p. 243)
- Automotive Engine Performance Specialist Certificate (p. 243)
- Automotive Fabrication Specialist Certificate (p. 243)
- Automotive Light Repair Specialist Certificate (p. 244)
- Automotive Maintenance Skills Certificate (p. 244)
- Automotive Management Certificate (p. 244)
- Automotive Manual Drive Train Specialist Certificate (p. 245)
- Automotive Service Advisor Certificate (p. 245)
- Automotive Technology Associate in Science Degree (p. 246)
- Automotive Technology Certificate (p. 247)
- Automotive: Emission Control Specialist Certificate (p. 247)

## Courses

**AUTO 050 F Automotive Specialty Practice** 2 Units

**Corequisite(s):** AUTO 060 F or AUTO 065 F or AUTO 070 F or AUTO 073 F or AUTO 081 F or AUTO 082 F or AUTO 083 F or AUTO 084 F or AUTO 086 F or AUTO 088 F or AUTO 089 F or AUTO 090 F or AUTO 091 F, with a grade of C or better or Pass.

18 hours lecture and 72 hours lab per term. In this course, emphasis is placed on the development and reinforcement of automotive repair skills in the area of student interest and advanced level of study. Lectures cover automotive repair procedures, service department operation, organization, support staff, repair documentation, technician certification and customer satisfaction. (Degree Credit)

**AUTO 051 F Internship in Automotive** 2-4 Units

**Prerequisite(s):** Completion of at least two Automotive Technology courses.

18 hours lecture and 60-180 lab/unpaid internship or 75-225 hours of paid internship per term in an automotive dealership or other automotive-related facility. This course requires supervised work experience each week to earn credits above the one unit of classroom lecture. The supervised work experience is at an automotive repair facility or related automotive business and subject to NOCCCD Board of Trustee approval. This course is designed to provide learning opportunities and earned college units through internship hours in the Career Technical Education field of Automotive Technology. No more than four units total (lecture and internship) may be applied toward the degree or certificate.

**AUTO 055 F Automotive Business Management** 5 Units

**Advisory:** AUTO 131 F with a grade of C or better or equivalent work experience.

72 hours lecture and 54 hours lab per term. This course covers the automotive service management operation associated with an automotive business and dealership. Instruction focuses on the repair order as a legal document, appointment systems, telephone skills, warranties, communication strategies, product knowledge, selling skills, proactive customer handling, and multiple ways to reduce costs and improve profits.

**AUTO 060 F Automotive Powertrains** 5 Units

**Advisory:** AUTO 131 F or equivalent work experience.

72 hours lecture and 72 hours lab per term. This course covers the repair of rear wheel drive (RWD) manual transmissions, front wheel drive (FWD), manual transmissions, clutches, transfer cases, and differentials. Instructional emphasis is placed on the principles, theory, and operation of gears, bearings, drive lines, universal joints, CV joints, drive train electrical/electronic systems, and rear axles. The student will be assigned and perform hands-on.

**AUTO 065 F Automotive Electrical and Electronic Systems** 5 Units

**Advisory:** AUTO 131 F or equivalent work experience.

72 hours lecture and 72 hours lab per term. This is an introductory course in the theory of electrical systems and electronic control of the modern automobile. This course covers basic electrical and electronic concepts, batteries, starting and charging systems, body computer systems, passive restraint systems, and diagnostic strategies. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Electrical Systems (A6) examination.

**AUTO 070 F Engine Reconditioning** 7 Units

**Prerequisite(s):** AUTO 081 F with a grade of C or better or equivalent work experience.

108 hours lecture and 54 hours lab per term. This course covers the operating principles, nomenclature, design, inspection, diagnostic mechanical repair procedures of automotive engines. This course offers time management, critical thinking, applied mathematics, applied physics, communication, and lifelong experiences through comprehensive and relevant laboratory projects.

**AUTO 072 F Automotive Engine Performance** 7 Units

**Advisory:** AUTO 131 F

108 hours lecture and 54 hours lab per term. This course covers engine tune-up, diagnosis, and repair of the electronic ignition system, emissions control system, and electronic powertrain management systems, including electronic fuel injection. Instruction will be given to prepare the student for the National Institute of Automotive Service Excellence (ASE) Engine Performance (A8) test. Modern test equipment will be utilized in the lab sessions.

**AUTO 073 F Brake Systems Repair** 7 Units

**Prerequisite(s):** AUTO 083 F with a grade of C or better or equivalent work experience.

108 hours lab and 54 hours lab per term. This course covers the operation, nomenclature, diagnosis, adjustment and repair procedures of automotive brake systems including electronically controlled anti-lock braking systems. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Brakes (A5) examination.

**AUTO 081 F Engine Rebuilding and Repair****8 Units****Advisory:** AUTO 131 F or equivalent work experience.

108 hours lecture and 108 hours lab per term. This course covers operating principles, nomenclature, design, and repair procedures of the modern automotive engine. Laboratory project emphasis is upon procedures of rebuilding an engine while out of the vehicle. Instruction will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Engine Repair (A1) examination.

**AUTO 082 F Engine Performance and Drivability****8 Units****Advisory:** AUTO 131 F

108 hours lecture and 108 hours lab per term. This course covers the operation, design, diagnosis, and repair of computerized engine management systems. Systems covered include induction, exhaust, input sensors, fuel delivery, fuel injection, ignition, and on-board diagnostics (OBD-II). Diagnostic strategies utilizing scan tools and lab scopes will be covered. Instruction will closely parallel topics addressed on the National Institute of Automotive Excellence (ASE) A8 Engine Performance examination.

**AUTO 083 F Brake and Suspension Systems Repair****8 Units****Advisory:** AUTO 131 F or equivalent

108 hours lecture and 108 hours lab per term. This course covers the operation, nomenclature, adjustment and repair procedures of automotive brake, suspension, and steering systems. Instruction will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Suspension and Steering (A4) and Brakes (A5) examinations. (Degree Credit)

**AUTO 084 F Automatic Transmissions****8 Units****Advisory:** AUTO 131 F or equivalent work experience.

108 hours lecture and 108 hours lab per term. This course will review the fundamentals of hydraulic systems, control valves, torque converters, planetary gear sets, clutches, bands, fluids, and filters. After this review of fundamental theory and operation, students will transition to testing, diagnosis, maintenance, and rebuilding of various types of automatic transmissions including electronically controlled transmissions and transaxles. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Automatic Transmission/Transaxle (A2) Examination. Field trips may be optional outside regularly-scheduled class times. (Degree Credit)

**AUTO 086 F Automatic Transmission Fundamentals****3 Units****Advisory:** AUTO 131 F or equivalent work experience.

36 hours lecture and 54 hours lab per term. This course covers the fundamentals of hydraulic systems, control valves, torque converters, planetary gear sets, clutches, bands, fluids, and filters. Preventative maintenance and diagnostic procedures will be discussed in lecture and laboratory activities with an emphasis on rear wheel drive transmissions. Instruction will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Automatic Transmission and Transaxle (A2) examination (Degree Credit).

**AUTO 088 F Fuel Systems and Advanced Drivability Diagnosis****4 Units****Advisory:** AUTO 131 F or equivalent work experience.

54 hours lecture and 54 hours lab per term. This course's instruction includes the theory and principles of carburetors, electrical systems, ignition systems, fuel injection systems, engine powertrain control systems, and the inspection and repair of automotive emission control systems. Modern diagnostic equipment including the exhaust gas analyzer, digital meters, scan tools, and digital storage oscilloscopes will be used in lab sessions. This course helps to prepare a student for The State of California Smog Check Inspector License Examination and for the National Institute for Automotive Service Excellence (ASE) A8 and L1 tests. (Degree Credit)

**AUTO 089 F Automotive Air Conditioning****4 Units****Advisory:** AUTO 131 F or equivalent work experience.

54 hours lecture and 54 hours lab per term. This course covers the theory and principles of automotive air conditioning, including service, maintenance, diagnosis and repair. Students will be given the opportunity to earn the MACS 609 Certification through proctored examination. Topics addressed on the ASE Heating and Air Conditioning Test (A7) will be emphasized. (Degree Credit)

**AUTO 090 F Emission Control Systems and Advanced Diagnosis****6 Units****Advisory:** AUTO 131 F or equivalent work experience.

90 hours lecture and 54 hours lab per term. This course's instruction includes the theory and principles of automotive ignition systems, electrical systems, emission control systems, fuel injection systems, and California Smog Inspection Procedures. Instructional emphasis is on information needed to prepare for The State of California Smog Check Inspector and/or Smog Check Repair Technician License Examinations and the National Institute for Automotive Service Excellence (ASE) A8 and L1 tests. Modern diagnostic equipment including the exhaust gas analyzer, scan tools, digital meters, and engine oscilloscopes will be used in laboratory sessions. (Degree Credit)

**AUTO 091 F Cylinder Head Repair****4 Units****Advisory:** AUTO 131 F or equivalent work experience.

54 hours lecture and 54 hours lab per term. This course covers operating principles, nomenclature, design and repair procedures of modern cylinder heads. Emphasis is on cylinder head repair procedures that are performed by automotive repair shops, including diagnosis, bench work, removal and installation.

**AUTO 096 F Performance Technology****4 Units****Advisory:** AUTO 131 F

54 hours lecture and 54 hours lab per term. This course covers the practical applications of performance and durability pertaining to motorized vehicles. Topics include areas of engine, drivelines, brakes, and suspension necessary for better performance and increased safety and durability.

**AUTO 131 F Automotive Fundamentals****4.5 Units**

72 hours lecture and 36 hours lab per term. This course emphasizes basic operating principles, nomenclature, preventative maintenance, inspection, and minor repair procedures. (Degree Credit) (CSU)

## Automatic Transmission Specialist Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C40649

The **Automatic Transmission Specialist Certificate** is designed to provide the student with entry level employment skills needed in the area of automatic transmission service and repair. A student can seek employment in new car dealerships, specialty repair shops, and franchise automotive repair facilities. The course work will develop a student's understanding of automatic transmission operation, components, service procedures, and rebuilding techniques. This certificate requires a total of 18 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (18 units):</b>		
AUTO 050 F	Automotive Specialty Practice	2

AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 084 F	Automatic Transmissions	8
AUTO 086 F	Automatic Transmission Fundamentals	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and practice safe work habits when using tools and equipment in an automotive repair shop.

**Outcome 2:** Inspect, identify, and repair automatic transmission/transaxle malfunctions following manufacturer specifications and procedures.

**Outcome 3:** Perform a wide array of preventative maintenance, service, and repair procedures related to automatic transmissions and automatic transaxles.

**Outcome 4:** Using a vehicle repair order, explain and record vehicle inspection and repair procedures performed in compliance with automotive industry standards.

## Automotive Chassis Specialist Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C40646

The **Automotive Chassis Specialist Certificate** will provide the student with entry level employment skills needed in the area of automotive chassis repair. A student can seek employment in new car dealerships, specialty repair shops, and franchise automotive repair facilities with the theory of operation and repair skills addressed in these three required courses. This certificate requires a total of 22-24 units of which 20 units are in required courses.

Code	Title	Units
<b>Required Courses (20 units):</b>		
AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 073 F	Brake Systems Repair	7
AUTO 083 F	Brake and Suspension Systems Repair	8
<b>Restricted Electives (2-4 units):</b>		<b>2-4</b>
AUTO 050 F	Automotive Specialty Practice	2
AUTO 051 F	Internship in Automotive	2-4
<b>Total Units</b>		<b>22-24</b>

## Program Student Learning Outcomes

**Outcome 1:** Inspect automotive chassis systems for faults, measure components, compare measurements to specifications, and propose corrective actions to be completed.

**Outcome 2:** Identify and practice safe work habits when using tools and equipment in an automotive repair shop.

**Outcome 3:** Using a vehicle repair order, explain and record the chassis inspection and repair procedures performed in compliance with automotive industry standards.

## Automotive Engine Performance Specialist Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C40900

The **Automotive Engine Performance Specialist Certificate** is designed to prepare students for entry level employment as an engine performance and drivability technician. A student can seek employment in new car dealerships, specialty repair shops, and franchise automotive repair facility. This certificate requires a total of 21 units. A grade of C is required in each course taken.

Code	Title	Units
<b>Required Courses (21 units):</b>		
AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 081 F	Engine Rebuilding and Repair	8
AUTO 082 F	Engine Performance and Drivability	8
<b>Total Units</b>		<b>21</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and practice safe work habits when using tools and equipment in an automotive repair shop.

**Outcome 2:** Inspect, identify, and repair vehicle malfunctions following manufacturer specifications and procedures.

**Outcome 3:** Perform a wide array of preventative maintenance, service, diagnosis, and repair procedures related to engine performance and drivability.

**Outcome 4:** Using a vehicle repair order, explain and record vehicle inspection and repair procedures performed in compliance with automotive industry standards.

## Automotive Fabrication Specialist Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 1C40679

The **Automotive Fabrication Specialist Certificate** is designed to provide the student with entry level skills needed to gain employment in the automotive custom and fabrication area. Students will learn techniques of design, manufacturing, fabrication, and repair of automotive related components. A student can seek employment in new car dealerships, specialty repair shops, custom repair or fabrication shops, automotive restoration shops, and franchise automotive repair facilities. This certificate requires a total of 27.5 units. A minimum grade of C is required in each course taken.

Code	Title	Units
<b>Required Courses (27.5 units):</b>		
AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 083 F	Brake and Suspension Systems Repair	8
AUTO 131 F	Automotive Fundamentals	4.5
DRAF 171 F	Fundamentals of Drafting	2
MACH 116 F	Machine Tools	2
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
WELD 120 F	Gas Shielded Arc Welding	3
<b>Total Units</b>		<b>27.5</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and practice safe work habits when using tools and equipment in an automotive repair shop.

**Outcome 2:** Plan, design and fabricate various components related to the automotive industry.

## Automotive Light Repair Specialist Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C40654

The **Automotive Light Repair Specialist Certificate (formerly Automotive Light Repair Specialist Skills Certificate)** is designed to provide the student with entry level employment skills needed in the areas of automotive repair that have a high volume of regular service and maintenance. Students will learn to diagnosis, service, and repair electrical and lighting systems, heating and air conditioning systems, brake systems, wheels and tires, suspensions, and wheel alignment. A student can seek employment in new car dealerships, specialty repair shops, and franchise automotive repair facilities as a lube technician, A/C technician, brake repair technician, or a wheel alignment technician. This certificate requires a total of 19 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (19 units):</b>		
AUTO 050 F	Automotive Specialty Practice	2
AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 083 F	Brake and Suspension Systems Repair	8
AUTO 089 F	Automotive Air Conditioning	4
<b>Total Units</b>		<b>19</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and practice safe work habits when using tools and equipment in an automotive repair shop.

**Outcome 2:** Inspect, identify, and repair vehicle malfunctions following manufacturer specifications and procedures.

**Outcome 3:** Using a vehicle repair order, explain and record vehicle inspection and repair procedures performed in compliance with automotive industry standards.

**Outcome 4:** Perform a wide array of vehicle preventative maintenance, service, and repair procedures related to electrical and lighting systems, heating and air conditioning systems, brake systems, suspensions, wheels and tires, and wheel alignment.

## Automotive Maintenance Skills Certificate

Division: Technology and Engineering

### Requirements

Program Code: 2C40648

The **Automotive Maintenance Skills Certificate (formerly Automotive Maintenance Specialist Skills Certificate)** is designed to provide the student with entry level employment skills needed in the area of automotive maintenance. A student can seek employment in new car dealerships, specialty repair shops, and franchise automotive repair facilities. The program work will develop a student's understanding of general automotive diagnosing, servicing and repair/replacement of automotive components. This certificate requires a total of 22 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (22 units):</b>		
AUTO 070 F	Engine Reconditioning	7
AUTO 073 F	Brake Systems Repair	7
AUTO 082 F	Engine Performance and Drivability	8
<b>Total Units</b>		<b>22</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and practice safe work habits when using tools and equipment in an automotive repair shop.

**Outcome 2:** Inspect, identify, and repair vehicle malfunctions following manufacturer specifications and procedures.

**Outcome 3:** Using a vehicle repair order, explain and record vehicle inspection and repair procedures performed in compliance with automotive industry standards.

**Outcome 4:** Perform a wide array of vehicle preventative maintenance and service procedures.

## Automotive Management Certificate

### Requirements

PROGRAM CODE: 2C12007

The **Automotive Management Certificate** is designed to provide the student with entry level employment skills needed in the area of automotive management. A student can seek employment as a service consultant, service manager, or service department dispatcher at new car dealerships, specialty repair shops, franchise automotive repair facilities, or as a sole proprietor. The course work will develop a student's understanding of the major automotive systems and thereby enhance their ability

to communicate repair recommendations to customers. The proper calculations of repair costs and the management of industry recognized documents associated with vehicle repairs will be covered in the required courses. This certificate requires a total of 36.5-43.5 units.

Code	Title	Units
<b>Required Courses (9.5 units):</b>		
AUTO 055 F	Automotive Business Management	5
AUTO 131 F	Automotive Fundamentals	4.5
<b>Restricted Electives (27-34 units):</b>		<b>27-34</b>
AUTO 051 F	Internship in Automotive	2-4
AUTO 060 F	Automotive Powertrains	5
AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 081 F	Engine Rebuilding and Repair	8
AUTO 082 F	Engine Performance and Drivability	8
AUTO 083 F	Brake and Suspension Systems Repair	8
AUTO 084 F	Automatic Transmissions	8
AUTO 086 F	Automatic Transmission Fundamentals	3
AUTO 089 F	Automotive Air Conditioning	4
BUS 151 F	Business Mathematics	3
BUS 180 F	Small Business Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
CIS 100 F	Introduction to Personal Computers	4
TECH 081 F	Technical Mathematics I	3
<b>Total Units</b>		<b>36.5-43.5</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and comply with automotive industry safety standards associated with an automotive repair facility.

**Outcome 2:** Demonstrate an understanding of automotive systems through meaningful discussion of vehicle malfunctions experienced by a customer.

**Outcome 3:** Generate a vehicle repair order and compute the repair costs associated with the customers' concerns.

**Outcome 4:** Employ high ethical standards when conducting business with automotive repair customers. Demonstrate alert behavior when discussing customer vehicle repairs or billing questions.

## Automotive Manual Drive Train Specialist Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C40655

The **Automotive Manual Drive Train Specialist Certificate (formerly Automotive: Manual Drive Train Specialist Skills Certificate)** is designed to provide the student with entry level employment skills needed in the area of automotive service and repair of manual transmissions, manual transaxles, clutch systems, drivelines, and differentials. A student can seek employment in new car dealerships, specialty repair shops, and franchise

automotive repair facilities. This certificate requires a total of 20 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (20 units):</b>		
AUTO 050 F	Automotive Specialty Practice	2
AUTO 060 F	Automotive Powertrains	5
AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 083 F	Brake and Suspension Systems Repair	8
<b>Total Units</b>		<b>20</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and practice safe work habits when using tools and equipment in an automotive repair shop.

**Outcome 2:** Inspect, identify and repair vehicle malfunctions following manufacturer specifications and procedures.

**Outcome 3:** Using a vehicle repair order, explain and record vehicle inspection and repair procedures performed in compliance with automotive industry standards.

**Outcome 4:** Perform a wide array of preventative maintenance, service, and repair procedures related to manual transmissions, manual transaxles, clutch systems, drivelines and differentials.

## Automotive Service Advisor Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C40647

The **Automotive Service Advisor Certificate (formerly Automotive Service Advisor Skills Certificate)** is designed to provide the student with entry level employment skills needed in the area of automotive service advising, service consulting, customer greeting, and repair order dispatching. A student can seek employment in new car dealerships, specialty repair shops, and franchise automotive repair facilities. The course work will develop a student's understanding of the major automotive systems and their ability to communicate malfunctions to a customer. The proper calculations of repair costs and the completion of industry recognized repair orders will also be covered in the course work. This certificate requires a total of 18.5-22.5 units. A minimum grade of C is required in each course taken.

Code	Title	Units
<b>Required Courses (9.5 units):</b>		
AUTO 131 F	Automotive Fundamentals	4.5
CIS 148 F	Introduction to Personal Computer Communications	2
MKT 208 F	Principles of Selling	3
<b>Restricted Electives (9-13 units):</b>		<b>9-13</b>
AUTO 051 F	Internship in Automotive	2-4
AUTO 055 F	Automotive Business Management	5
AUTO 060 F	Automotive Powertrains	5

AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 081 F	Engine Rebuilding and Repair	8
AUTO 082 F	Engine Performance and Drivability	8
AUTO 083 F	Brake and Suspension Systems Repair	8
AUTO 086 F	Automatic Transmission Fundamentals	3
AUTO 089 F	Automotive Air Conditioning	4
BUS 180 F	Small Business Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
<b>Total Units</b>		<b>18.5-22.5</b>

## Program Student Learning Outcomes

**Outcome 1:** Prepare repair orders that reflect an accurate representation of the customer concern.

**Outcome 2:** Explain the proper operation and malfunction of automotive systems in a clear and concise manner to customers.

**Outcome 3:** Estimate the automotive repair cost and discuss the repair options with a customer. Follow up with the customer after the completion of repairs.

**Outcome 4:** Demonstrate professionalism and courtesy to fellow employees and customers. Adhere to high ethical standards in all business transactions.

## Automotive Technology Associate in Science Degree

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2S03838

The **Automotive Technology Associate in Science Degree** is designed to provide the student with the knowledge and skills needed for employment in the following automotive industry areas: Engine Repair, Automatic Transmissions/Transaxles Repair, Manual Drive Trains and Axles Repair, Suspension and Steering Repair, Brakes Repair, Electrical and Electronics Repair, Heating and Air Conditioning Repair, Engine Performance Repair, Service Consulting, Service Management, and Parts Control. This degree requires a total of 46.5-52.5 units.

Code	Title	Units
<b>Required Courses (36.5 units):</b>		
AUTO 081 F	Engine Rebuilding and Repair	8
AUTO 082 F	Engine Performance and Drivability	8
AUTO 083 F	Brake and Suspension Systems Repair	8
AUTO 084 F	Automatic Transmissions	8
AUTO 131 F	Automotive Fundamentals	4.5
<b>Restricted Electives (10-16 units):</b>		
<b>10-16</b>		
AUTO 050 F	Automotive Specialty Practice	2
AUTO 051 F	Internship in Automotive	2-4
AUTO 055 F	Automotive Business Management	5
AUTO 060 F	Automotive Powertrains	5
AUTO 065 F	Automotive Electrical and Electronic Systems	5

AUTO 070 F	Engine Reconditioning	7
AUTO 072 F	Automotive Engine Performance	7
AUTO 073 F	Brake Systems Repair	7
AUTO 086 F	Automatic Transmission Fundamentals	3
AUTO 088 F	Fuel Systems and Advanced Drivability Diagnosis	4
AUTO 089 F	Automotive Air Conditioning	4
AUTO 090 F	Emission Control Systems and Advanced Diagnosis	6
AUTO 091 F	Cylinder Head Repair	4
AUTO 096 F	Performance Technology	4
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
<b>Total Units</b>		<b>46.5-52.5</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and describe the components and their operation of the following automotive systems:

- Engine Repair
- Engines (Internal Combustion and Hybrid Technology)
- Automatic Transaxles/Transmissions
- Manual Drivetrain and Axles
- Suspension and Steering
- Brakes
- Electrical and Electronic Systems
- Heating and Air Conditioning
- Engine Performance

**Outcome 2:** Demonstrate the proper safety procedures and techniques required in an automotive repair facility.

**Outcome 3:** Perform Inspection and diagnostic procedures needed to assess the following automotive systems:

- Engine repair
- Engines (Inspection Combustion and Hybrid Technology)
- Automatic Transaxles/Transmissions
- Manual Drivetrain and Axles
- Suspension and Steering
- Brakes
- Electrical and Electronic Systems
- Heating and Air Conditioning
- Engine Performance

**Outcome 4:** Demonstrate automotive service and repair procedures following manufacturer's specifications.

**Outcome 5:** Identify and demonstrate proper documentation of automotive repairs.

# Automotive Technology Certificate

## Requirements

PROGRAM CODE: 2C21270

The **Automotive Technology Certificate** allows the student flexibility to study in all areas of automotive repair or to focus on a series of courses in a particular area of repair. It incorporates electives for students to acquire skills in other Career Technical Education areas that are often required in the automotive career path. The Automotive Technology Certificate Program is designed to prepare students for employment in the automotive industry as automotive technicians, apprentice mechanics, automotive parts distributor or salesperson, or specialists in one of the many areas in, or jobs related to, the automotive industry. This certificate requires a total of 33.5-41.5 units. A minimum grade of C is required in each course taken. At least half the units toward the certificate must be taken at Fullerton College.

Code	Title	Units
<b>Restricted Electives - Select from the following AUTO courses (28.5-35.5 units):</b>		
AUTO 050 F	Automotive Specialty Practice	2
AUTO 051 F	Internship in Automotive	2-4
AUTO 060 F	Automotive Powertrains	5
AUTO 065 F	Automotive Electrical and Electronic Systems	5
AUTO 070 F	Engine Reconditioning	7
AUTO 072 F	Automotive Engine Performance	7
AUTO 073 F	Brake Systems Repair	7
AUTO 081 F	Engine Rebuilding and Repair	8
AUTO 082 F	Engine Performance and Drivability	8
AUTO 083 F	Brake and Suspension Systems Repair	8
AUTO 084 F	Automatic Transmissions	8
AUTO 086 F	Automatic Transmission Fundamentals	3
AUTO 088 F	Fuel Systems and Advanced Drivability Diagnosis	4
AUTO 089 F	Automotive Air Conditioning	4
AUTO 090 F	Emission Control Systems and Advanced Diagnosis	6
AUTO 091 F	Cylinder Head Repair	4
AUTO 131 F	Automotive Fundamentals	4.5
<b>Select an additional 5-6 units from the list below:</b>		<b>5-6</b>
MACH 116 F	Machine Tools	2
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
WELD 120 F	Gas Shielded Arc Welding	3
TECH 081 F	Technical Mathematics I	3
<b>Total Units</b>		<b>33.5-41.5</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate safe work habits associated with automotive repair shop employment and safely operate a wide array of hand and power tools to accomplish vehicle repairs.

**Outcome 2:** Perform diagnostic procedures to determine the cause of vehicle malfunctions and recommend the corrective actions to be taken.

**Outcome 3:** Estimate the cost of a vehicle repair including parts and labor and write it in a clear and concise manner.

**Outcome 4:** Conduct a wide range of vehicle repairs of the various automotive systems.

**Outcome 5:** Compose a summary of work performed on a vehicle using the industry-recognized concern, cause, and correction format.

# Automotive: Emission Control Specialist Certificate

## Requirements

PROGRAM CODE: 2C37963

The **Emission Control Specialist Certificate** will prepare the student for The National Institute of Automotive Service Excellence (ASE) Exams. The State of California Smog Check Inspector License Exam, and/or the State of California Smog Check Repair Technician License Exam. Completion of the Emission Control Specialist Certificate, ASE Exams. The California Smog Check Inspector Exam, and The California Smog Check Repair Technician License Exam will enable a student to seek employment within the California Smog Check Program. The Emission Control Specialist Certificate Program requires a total of 18 units of which 18 units are in required courses.

Code	Title	Units
<b>Required Courses (18 units):</b>		
AUTO 082 F	Engine Performance and Drivability	8
AUTO 088 F	Fuel Systems and Advanced Drivability Diagnosis	4
AUTO 090 F	Emission Control Systems and Advanced Diagnosis	6
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Integrate advanced theory and diagnostic techniques through the use of advanced tools related to the repair of automotive emission control systems.

**Outcome 2:** Evaluate and solve questions related to mechanical engine performance, computer-controlled powertrain systems, and electronic fuel management systems in preparation for The National Institute of Automotive Service Excellence (ASE) Exams. The State of California Smog Check Inspector Exam, and The State of California Smog Check Repair Technician Licensing Exam.

# Biology

Division: Natural Sciences

## Faculty

Maala Allen  
Kenneth Collins  
Spiridon Dimitratos  
David Dorado  
Jeffery Feaster  
Anastasia Nagel  
Gitanjali Nilkanth

Kimberly Rosales  
Jo Wen Wu  
Calvin Young  
Gilene Young

## Degrees and Certificates

Biology Associate in Arts Degree (p. 251)  
Biology Associate in Science Degree for Transfer (p. 251)  
Biotechnology Biomanufacturing Technician Certificate (p. 252)  
Biotechnology Lab Assistant Skills Certificate (p. 252)  
Biotechnology Laboratory Technician Certificate (p. 252)  
Biological Technician Associate in Science Degree (p. 250)

## Courses

### **BIOL 100 F Principles of Biology** **4 Units**

72 hours lecture per term. This course is an introductory non-majors course that will 1) emphasize the fundamental understanding of basic biological principles, 2) illustrate the structure and function of living organisms and their relationship to the physical world, and 3) develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Topics include 1) the structure and function of life at the cellular and organismic levels, 2) metabolism, photosynthesis and energetics, 3) cell division and animal development, 4) classical and molecular genetics, 5) biotechnical development and applications, 6) evolution and adaptations of living organisms, and 7) ecological relationship and environmental conservation. (Degree Credit) (CSU) (UC Credit Limitation: BIOL 100 F and 101 F combined: maximum credit one course; no UC credit if taken after BIOL 170 F or a 200-level biology course) AA GE, CSU GE, IGETC

### **BIOL 101 F General Biology** **5 Units**

72 hours lecture and 54 hours lab per term. This integrated lecture-lab course is an introductory non-majors course that will emphasize basic biological principles, illustrate the structure and function of living organisms and their relationship to the physical world, and develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC; no UC credit if taken after BIOL 170 F or a 200-level biology course) AA GE, CSU GE, IGETC

### **BIOL 101HF Honors General Biology** **5 Units**

72 hours lecture and 54 hours lab per term. This Honors-enhanced course is an introductory non-majors course that will emphasize the fundamental understanding of basic biological principles, illustrate the structure and function of living organisms and their relationship to the physical world, and develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Lecture topics include the structure and function of life at the cellular and organismal level, metabolism, photosynthesis and energetics, cell division and animal development, classical and molecular genetics, developments and applications in biotechnology, evolution and adaptations of living organisms, and ecological relationships and environmental conservation. Field trips may be required outside regularly scheduled class times. (Degree Credit) (CSU) (UC; no UC credit if taken after a 200 level Biology) AA GE, CSU GE, IGETC

### **BIOL 102 F Human Biology** **3 Units**

54 hours lecture per term. This course is designed to study modern biological concepts presented in a human context. Concepts include biological chemistry, cellular basis of life, energetics, cell cycle, anatomy, physiology, reproduction, development, genetics, demography, ecology and evolution. Included in the course are discussions of current topics on environmental, nutritional and public health issues as they relate to the human condition. (Degree Credit) (CSU) (UC; no UC credit if taken after BIOL 170 F or a 200-level biology course) AA GE, CSU GE, IGETC

### **BIOL 102LF Human Biology Laboratory** **1 Unit**

**Corequisite(s):** BIOL 102 F with a grade of C or better.  
54 hours lab per term. This lab course supplements the BIOL 102 F lecture. This is a general education course for non-biology majors providing direct participation in experiments, demonstrations and discussions. Topics include: elements of human anatomy and physiology, fitness, nutrition, disease, elements of human heredity and environmental adaptations. (Degree Credit) (CSU) (UC; no UC credit if taken after a 200-level Biology course) CSU GE, IGETC

### **BIOL 104 F Biology of Insects and Spiders** **3 Units**

54 hours lecture per term. This course familiarizes students with basic biological principles as illustrated by insects and spiders. Special emphasis is placed on their relations to plants and animals including humans. Living and preserved insects and spiders and many other visual aids will be used to help describe in detail life cycles, evolution, adaptations to local environment and the major taxonomic groups. (Degree Credit) (CSU) (UC) AA GE, CSU GE

### **BIOL 108 F Plants and People** **3 Units**

54 hours lecture per term. This course is the study of basic plant biology and the history and uses of plants and plant products by human societies. Plants that have played major roles in the molding of human society and civilization are studied. This course will also cover the changes made by human civilizations to plant morphology and physiology. Lectures are integrated with discussion, demonstration and hands-on learning activities. Specific topics include plant structure, function, origins of agriculture and domestication. Historical and contemporary uses of important plant products such as drugs, medicines, oils, resins, beverages, foods and industrial products are included. The nutritional values of major food plants are evaluated. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### **BIOL 109 F Genetics and Biotechnology in Society** **3 Units**

54 hours lecture per term. This introductory survey course will cover the basic concepts and experiments of transmission genetics and molecular biology. The applications, social consequences and ethical implications of reproductive technology, genomics and biotechnology in medicine and agriculture are also addressed. (Degree Credit) (CSU) (UC; no UC credit if taken after BIOL 170 F or a 200-level Biology course) AA GE, CSU GE, IGETC

### **BIOL 109LF Biotechnology Lab Techniques** **2 Units**

108 hours lab per term. In this course, students will learn skills and gain experience with tools of the molecular biology lab. Students will learn safety, sterile technique, solution preparation, record keeping, proper use of instruments, bacterial culture, recombinant DNA cloning, protein purification and applications on the computer. Class emphasizes practical hands-on experience and an understanding of the basic principles behind the technologies. (Note: BIOL 109 F is not required to take this course) (Degree Credit) (CSU)



**BIOL 141 F Marine Mammal Biology and Conservation 3 Units**

54 hours lecture per term. This course will provide an overview of the diversity of marine mammal species, along with their natural history, behavior, physiology, and ecology. It will introduce students to the techniques used to study marine mammals, and their applications to conservation and management issues. Required field trips are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**BIOL 170 F Organismal Biology 5 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or assessment through the college's multiple placement processes.

**Advisory:** BIOL 101 F or BIOL 190 F and BIOL 190LF or AP Biology with a grade of 3 or better on the placement exam.

72 hours lecture and 54 hours lab per term. This course is designed to familiarize students with the diversity and biology of living organisms. Integrated lab and lecture sessions emphasize the classification of organisms with respect to the evolution of anatomical and physiological adaptations. This class is designed for Biological Science majors in transfer programs. Field trips outside regularly-scheduled class times are required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: BIOL 140)

**BIOL 190 F Introduction to Biotechnology 3 Units**

54 hours lecture per term. This course will teach students about all aspects of the biotechnology field, with content appropriate for a wide range of students and professionals. Topics will include the biology, business and legal/ethical issues surrounding biotechnology, cells, genes, DNA, proteins, genetic engineering, drug development, biofuels, agriculture, bioremediation, biotechnology company structure, and the regulations affecting the field. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**BIOL 190LF Introduction to Biotechnology Lab 1 Unit**

**Corequisite(s):** BIOL 190 F with a grade of C or better.

54 hours lab per term. This course prepares students for entry-level work in the biotechnology industry by emphasizing the basic concepts needed to work effectively in a bioscience laboratory. Topics include laboratory math, basic chemistry of buffers, health and safety, metrology, quality control, biological molecules, gene expression, cell structure and molecular biology techniques. This course introduces students to basic biotechnology laboratory skills including basic separation methods, aseptic technique and documentation. Good communication and work-readiness skills are emphasized. (Degree Credit) (CSU) (UC) IGETC

**BIOL 191 F Biotechnology A - Basic Laboratory Skills 4 Units**

54 hours lecture and 54 hours lab per term. This course provides an introduction to the fundamental skills necessary for any biotechnology laboratory. Skills include maintenance of an industry standard notebook; preparation and sterilization of solutions, reagents, and media; utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, and laboratory safety regulations. Compliance with industry standards and regulations will be incorporated into course procedures. (Degree Credit) (CSU)

**BIOL 192 F Biotechnology B - Protein Biochemistry 4 Units**

**Prerequisite(s):** BIOL 191 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers fundamental skills in applied biotechnology necessary for any biotechnology laboratory but particularly focuses on downstream manufacturing processes in biomanufacturing. Skills include maintenance of an industry standard notebook, preparation and sterilization of solutions, reagents and media, utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, lab safety regulations, in vitro translation, large scale expression, purification, modification, western blot analysis, ELISA, antibody tagging, and fluorescent microscopy. (Degree Credit) (CSU)

**BIOL 193 F Biotechnology C - Molecular Biology 4 Units**

**Prerequisite(s):** BIOL 191 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course introduces the fundamental skills in any biotechnology laboratory focusing on the upstream research and development process. Skills include the maintenance of an industry standard notebook, preparation and sterilization of solutions, reagents, and media, utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, lab safety regulations, DNA/RNA extraction and purification, bioinformatics, polymerase chain reaction, electrophoresis, DNA sequencing, recombinant DNA technology, DNA cloning, transformation, in vitro transcription, fluorescence in situ hybridization, and Southern blot analysis. Compliance with industry standards and regulations will be incorporated into course procedures. (Degree Credit) (CSU)

**BIOL 194 F Quality and Regulatory Compliance in the Biosciences 2 Units**

36 hours lecture per term. This course will cover quality assurance and regulatory compliance for the bioscience industries. Topics will span quality control and Federal Drug Administration (FDA) regulations for the biotechnology, biopharmaceutical, biomedical device and food industries. Theories and application of quality assurance and quality control will be presented and several different quality systems will be discussed such as CGMP (Good Manufacturing Practices), ISO9000 (International Standards Organization), Six Sigma and Lean. (Degree Credit) (CSU)

**BIOL 196 F Tissue Culture Methods 2 Units**

**Prerequisite(s):** BIOL 191 F with a grade of C or better

18 hours lecture and 54 hours lab per term. This course provides theoretical and practical knowledge and skills on how to culture eukaryotic cells. Students acquire practical and theoretical knowledge of the structure, equipment, and sterile techniques of the cell culture laboratory, the growth conditions of cells, and how scientists attempt to mimic this in cultures. Among the topics covered are the composition of cell culture media, establishment of primary cultures and cell lines from normal tissue and cancer tissue, routine cultivation of cells, long-term storage, contamination, various methods for characterization of cells, transfection, and the use of cells in culture to resolve various issues in basic and applied research. (Degree Credit) (CSU) (C-ID: BIOT 230BX)

**BIOL 222 F Marine Biology 3 Units**

**Prerequisite(s):** A biological science laboratory course with a grade of C or better

36 hours lecture and 54 hours lab per term. This course presents an overview of life in the sea. Lectures, labs and fieldwork provide an introduction to the diversity of marine organisms and the physical and biological processes that influence their structure, life history, behavior, and distribution. An emphasis is placed on the interactions of these organisms and processes in a variety of marine habitats. Marine ecology and conservation are also discussed. Both lab and field exercises will be used to provide hands-on experience with marine organisms, habitats, and research techniques. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**BIOL 266 F General Zoology 5 Units**

54 hours lecture and 108 hours lab per term. This course is designed to familiarize students with the animal kingdom. Integrated lab and lecture sessions emphasize the evolution of anatomical, physiological and behavioral adaptations. This class is designed for Biological Science majors in transfer programs. (Degree Credit) (CSU) AA GE, CSU GE

**BIOL 268 F General Botany****5 Units****Prerequisite(s):** BIOL 111 F with a grade of C or better.

54 hours lecture and 108 hours lab per term. This course is a study of structure and function of roots, stems, leaves, flowers, fruits, and seeds of the flowering plants. Characteristics and life cycles of some of the algae, fungi, mosses, ferns, club mosses, and cone-bearing plants are covered. Environmental relationships, classification, genetics, propagation, and the applications of these to agriculture and forestry are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**BIOL 272 F Cell and Molecular Biology****4 Units****Prerequisite(s):** BIOL 170 F and CHEM 111AF with a grade of C or better

54 hours lecture and 54 hours lab per term. This course is designed for Biological Sciences majors in transfer programs. Integrated lectures and labs cover the principles and applications of prokaryotic/eukaryotic cell structure and function, biological molecules, cell reproduction and controls, molecular genetics, classical/Mendelian genetics, cell transport, cell metabolism and cellular communication. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**BIOL 274 F General Ecology****4 Units****Prerequisite(s):** BIOL 170 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course is designed to familiarize students with basic principles governing interactions between organisms and the environment. Integrated lectures, field trips, and lab sessions emphasize basic ecological principles and relationships. These include identification of plants and animals, community analysis, environmental survey techniques, laws of thermodynamics, behavioral and physiological adaptations of organisms, and ecological models. Field trips, including an overnight trip, are required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**BIOL 276 F Genetics and Evolutionary Biology****4 Units****Prerequisite(s):** BIOL 272 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course is a comprehensive survey of the processes and products of genetics. Through a review of experimental evidence, students evaluate the basic tenets of molecular, transmission and population genetics, and use the science of genetics to appraise the relationship of genetics to the processes and products of microevolution and macroevolution. Lab topics include DNA replication/repair, transcription and translation and regulation of gene expression. The philosophy and methods of science, as well as the theory of evolutionary thought are integrated throughout. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC)

**BIOL 297 F Biosciences Internship****2-4 Units**

18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in Biology or Biotechnology. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers in the biosciences. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internships. (Degree Credit) (CSU)

**BIOL 299 F Biological Science Independent Study****1 Unit****Prerequisite(s):** A 200-level course in the biological sciences with a grade of "B" or better

54 hours independent study per term. This course involves lab and/or field investigations under the guidance of members of the life sciences faculty. Hours to be arranged. Primarily for majors in life sciences who wish to increase their knowledge of the sciences through individual study and small group conferences. Independent research problems with staff supervision may be approved. Outside reading and written report required. Elective credit in the sciences area. (Degree Credit) (CSU) (UC review required)

## Biological Technician Associate in Science Degree

### Requirements

PROGRAM CODE: 2S08414

The **Biological Technician Associate in Science Degree** program requires a total of 18-22 units, of which 9-13 units are in required courses. An additional 5-13 units must be chosen from the restricted units listed below.

Code	Title	Units
<b>Required Courses (9-13 units):</b>		
BIOL 101 F	General Biology	5
or BIOL 170 F	Organismal Biology	
BIOL 109 F	Genetics and Biotechnology in Society	3
BIOL 109LF	Biotechnology Lab Techniques	2
CHEM 101 F	Chemistry for Allied Health Science	5
or CHEM 107 F	Preparation for General Chemistry	
CIS 111 F	Introduction to Information Systems	4
HORT 001 F	Principles of Horticulture I	4
HORT 002 F	Principles of Horticulture II	4
MICR 220 F	Medical Microbiology	4
TECH 082 F	Technical Mathematics II	3
<b>Restricted Electives - Select an additional 5-13 units:</b>		<b>8-9</b>
BIOL 222 F	Marine Biology	3
CHEM 111AF	General Chemistry I	5
HORT 205 F	Applied Entomology	3
MICR 262 F	General Microbiology	5
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
<b>TOTAL UNITS:</b>		<b>18-22</b>

### Program Learning Outcomes

**Outcome 1:** Demonstrate safe and proficient use of laboratory equipment and techniques.

**Outcome 2:** Demonstrate knowledge of biological processes from the molecular and cellular perspectives.

## Biology Associate in Arts Degree Requirements

PROGRAM CODE: 2A03820

The **Biology Associate in Arts Degree** program requires a total of 18-22 units of which 7-10 units are in required courses. An additional 8-15 units may be chosen from the required courses or restricted electives listed below.

Code	Title	Units
<b>Required Courses - Select from the following (7-10 units):</b>		
ANAT 231 F	General Human Anatomy	4
ANAT 240 F	Human Physiology	5
BIOL 222 F	Marine Biology	3
BIOL 266 F	General Zoology	5
BIOL 268 F	General Botany	5
BIOL 272 F	Cell and Molecular Biology	4
BIOL 274 F	General Ecology	4
BIOL 276 F	Genetics and Evolutionary Biology	4
MICR 262 F	General Microbiology	5
<b>Restricted Electives (8-15 units):</b>		
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
CHEM 211AF	Organic Chemistry I	5
CHEM 211BF	Organic Chemistry II	5
MATH 141 F	College Algebra	4
	or MATH 141HF Honors College Algebra	
MATH 142 F	Trigonometry	4
MATH 151 F	Calculus I (formerly MATH 150AF)	4
	or MATH 151HF Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
	or MATH 152HF Honors Calculus II	
PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II	4
PHYS 210 F	Physics with Calculus for the Life Sciences I	4
PHYS 211 F	Physics with Calculus for the Life Sciences II	4
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
<b>TOTAL UNITS:</b>		<b>18-22</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore topics in biology.

**Outcome 2:** Demonstrate safe and proficient use of laboratory equipment and techniques.

**Outcome 3:** Explain the significance of evolutionary theory and how it relates to life on Earth.

## Biology Associate in Science Degree for Transfer

Division: Natural Sciences

### Requirements

PROGRAM CODE: 2S37174

The **Biology Associate in Science Degree for Transfer**, also called the Biology AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Biology. Ed Code Section 66746-66749 states students earning the Biology AS-T degree will be granted priority for admission as a Biology major to a local CSU, as determined by the CSU campus to which the student applies. Students with a degree in biology may pursue careers in a variety of fields such as health care, biomedical/pharmaceutical research, education, environmental technology and more. A biology degree may also facilitate entry into various graduate or professional programs. The Biology AS-T Degree requires a total of 35 units of required courses and restricted electives as indicated below.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) for STEM or the California State University General Education – Breadth for STEM Requirements (p. 35) (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (9 units):</b>		
BIOL 170 F	Organismal Biology	5
BIOL 272 F	Cell and Molecular Biology	4
<b>List A (22 units):</b>		<b>22</b>

The student must complete 10 units of CHEM, 4 units of MATH, and an 8-unit sequence of PHYS from the list below:

CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
MATH 151 F	Calculus I (formerly MATH 150AF)	4
	or MATH 151HF Honors Calculus I (formerly MATH 150HF)	
PHYS 205 F & PHYS 206 F	Physics for the Life Sciences I and Physics for the Life Sciences II	8
PHYS 210 F & PHYS 211 F	Physics with Calculus for the Life Sciences I and Physics with Calculus for the Life Sciences II	8

PHYS 221 F & PHYS 222 F	General Physics I and General Physics II	8
<i>List B (4 units):</i>		4
BIOL 274 F	General Ecology	4
<b>Total Units</b>		<b>35</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore topics in biology.

**Outcome 2:** Demonstrate safe and proficient use of laboratory equipment and techniques.

**Outcome 3:** Explain the significance of evolutionary theory and how it relates to life on Earth.

## Biotechnology Biomanufacturing Technician Certificate

Division: Natural Sciences

### Requirements

PROGRAM CODE: 2C36709A

The **Biotechnology Biomanufacturing Technician Certificate** focuses on practical laboratory skills of protein biochemistry combined with training in quality assurance and quality control. The curriculum prepares a student to work in entry level positions in the field of biotechnology in high-tech industry and institutions. Employment opportunities include: biomedical industry, academic research labs, pharmaceutical, agriculture and food science labs. This Biotechnology Biomanufacturing Technician Certificate requires the completion of 19 units in required courses. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (19 units)</b>		<b>19</b>
BIOL 190 F	Introduction to Biotechnology	3
BIOL 190LF	Introduction to Biotechnology Lab	1
BIOL 191 F	Biotechnology A - Basic Laboratory Skills	4
BIOL 192 F	Biotechnology B - Protein Biochemistry	4
BIOL 194 F	Quality and Regulatory Compliance in the Biosciences	2
CHEM 111AF	General Chemistry I	5
or CHEM 201 F	Biochemistry for Allied Health Science	
<b>Total Units</b>		<b>19</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate a basic understanding of the quality and regulatory compliance within the biotechnology industry.

**Outcome 2:** Demonstrate safe and proficient handling of laboratory equipment and techniques for protein biochemistry

## Biotechnology Lab Assistant Skills Certificate

Division: Natural Sciences

### Requirements

PROGRAM CODE: 2C40523

The **Biotechnology Lab Assistant Skills Certificate** will prepare a student to work in entry-level positions in biotech and science-related industries. This program is focused on practical laboratory skills with training in a working laboratory setting. Employment opportunities include: biomedical industry, academic research labs, pharmaceutical industry, agriculture and food science labs. This certificate requires 13 units in required courses, with a grade of C or better in each course.

Code	Title	Units
<b>Required Courses (13 units)</b>		
BIOL 190 F	Introduction to Biotechnology	3
BIOL 190LF	Introduction to Biotechnology Lab	1
BIOL 191 F	Biotechnology A - Basic Laboratory Skills	4
CHEM 101 F	Chemistry for Allied Health Science	5
or CHEM 107 F	Preparation for General Chemistry	
<i>or Minimum score of 80% on the Chemistry Assessment.</i>		
<b>Total Units</b>		<b>13</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of the professions available in the biotechnology and molecular biosciences industry.

**Outcome 2:** Demonstrate an understanding of laboratory safety regulations, recognize potential hazards, and practice safe and proficient use of laboratory equipment.

**Outcome 3:** Demonstrate hands-on proficiency in basic molecular biology laboratory techniques.

**Outcome 4:** Demonstrate an understanding of basic molecular biology laboratory techniques.

## Biotechnology Laboratory Technician Certificate

### Requirements

PROGRAM CODE: 2C36708

The **Biotechnology Laboratory Technician Certificate** is designed for students who wish to obtain the skills required to gain employment in bioscience and biotechnology-influenced laboratories. Upon completion of this certificate program, students will be eligible to obtain employment as laboratory assistants, biomanufacturing technicians, or bioscience research and development technicians. The Biotechnology Laboratory Technician Certificate requires the completion of 20 units in required courses. An additional two courses (7-10 units) must be chosen from the restricted electives listed below. A grade of C or above must be earned for each of the courses.

Code	Title	Units
<b>Required Courses (20 units):</b>		
BIOL 190 F	Introduction to Biotechnology	3
BIOL 190LF	Introduction to Biotechnology Lab	1
BIOL 191 F	Biotechnology A - Basic Laboratory Skills	4
BIOL 192 F	Biotechnology B - Protein Biochemistry	4
BIOL 193 F	Biotechnology C - Molecular Biology	4
BIOL 194 F	Quality and Regulatory Compliance in the Biosciences	2
BIOL 196 F	Tissue Culture Methods	2
<b>Restricted Electives (7-10 units):</b>		<b>7-10</b>
BIOL 109 F	Genetics and Biotechnology in Society	3
BIOL 272 F	Cell and Molecular Biology	4
CHEM 111BF	General Chemistry II	5
MICR 220 F	Medical Microbiology	4
MICR 262 F	General Microbiology	5
<b>Total Units</b>		<b>27-30</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding and ability to use standard equipment, materials and techniques employed in research, clinical and industry laboratories based in biotechnology and molecular biology.

**Outcome 2:** Demonstrate good observational skills, ability to follow complex protocols without mistakes, ability to use laboratory math quickly and accurately, interpret experimental results accurately, troubleshoot experimental mistakes and maintain detailed and accurate laboratory manuals.

**Outcome 3:** Demonstrate an understanding and hands-on competency in sterile tissue culture techniques.

## Business

Division: Business and Computer Information Systems

### Faculty

Richard Ghidella  
Gary Graves  
Barry McCarthy  
Kathy Standen  
Marcus Wilson

### Degrees and Certificates

- Business Administration Associate in Arts Degree (p. 257)
- Business Administration Associate in Science Degree for Transfer (p. 258)
- Business Data Analytics Certificate (p. 259)
- Business Management Associate in Science Degree (p. 259)
- Business Management Certificate (p. 260)
- Business Networking and Sales Certificate (p. 260)
- Business Skills Certificate (p. 261)
- Digital Marketing Certificate (p. 261)
- Entrepreneurship Associate in Science Degree (p. 262)
- Entrepreneurship Certificate (p. 262)
- Finance Certificate (p. 263)

- Human Resources Management Certificate (p. 263)
- International Business Management Associate in Science Degree (p. 264)
- International Business Management Certificate (p. 264)
- International Business Skills Certificate (p. 265)
- Mobile Applications Entrepreneur Certificate (p. 265)
- Retail Management Certificate (p. 265)
- The Business of Art Certificate (p. 266)

## Courses

**BUS 021 F The Securities Market** **1 Unit**  
Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course provides an overview of the securities market. Topics to be discussed include types of markets, economic benefits, regulation, types of securities, participants in the market, brokerage houses, types of trades and orders, sources of investment information, and services offered by various types of investment professionals.

**BUS 022 F Common Stock** **1 Unit**  
Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course is an introduction to fundamental and technical analysis as it relates to common stock. Topics to be discussed include total return concept, return-risk characteristics, rights of stockholders, advantages and disadvantages of stock ownership, and basic valuation methods. An introduction to technical analysis with emphasis on chart patterns and technical indicators is also covered.

**BUS 023 F Fixed Income Securities** **1 Unit**  
Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course covers the different types of fixed-income securities and their characteristic features, the rights of security holders, and basic valuation approaches.

**BUS 024 F Stock Options** **1 Unit**  
Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course provides an introduction to puts and call options. Topics to be discussed include the options market, mechanics of investing in options, basic options strategies, and return-risk characteristics.

**BUS 025 F Investment and Retirement Plans** **1 Unit**  
Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course provides the fundamental concepts of mutual fund investing. The different types of investment companies, unique features, and advantages and disadvantages are covered. An overview of tax-deferred retirement plans is presented. Focus will be on managing self-directed IRAs and Keogh Plans.

**BUS 100 F Introduction to Business** **3 Units**  
54 hours lecture per term. This course is an introduction to the trends and opportunities in today's dynamic global business environment surveying economics, global markets, social responsibility, ownership forms, entrepreneurship, management organization, marketing, accounting and financial management. (CSU) (UC) AA GE, CSU GE (C-ID: BUS 110)

**BUS 101 F Personal Financial Management****3 Units**

**Prerequisite(s):** MATH 020 F with a grade of C or better, or any previous algebra course or math skills clearance.

54 hours lecture per term. This course covers the proper management of personal incomes and expenditures, practice computational skills, preparation to reason quantitatively, and explain and apply mathematical reasoning concepts to solve problems experienced in daily or professional life-related to money/finance. This course also includes a study of inflation and business cycles; commercial and savings accounts; budgets, charge accounts, installment buying, and borrowing money; property, income, estate, inheritance, and gift taxes; life, health, accident, property and miscellaneous insurance; pension plans and Social Security; owning a home; investing in securities; and trust funds and wills. This course is an integrative approach to personal finance focusing on practical financial decision making as well as the social, psychological, and physiological contexts in which those decisions are made. Students will perform calculations to analyze their savings, investments, budgets and develop a plan to meet financial goals. (Degree Credit) (CSU) CSU GE, AA GE

**BUS 106 F Business City Field Trip****1 Unit**

18 hours lecture per term. This course features business-focused city tours to domestic and international locations and offers unique in-the-field learning opportunities. In this course, students travel to the designated location and will be lodged and participate in lectures, discussions with business executives of local firms, connect with locals to understand social and cultural norms and local practices and site visits to local and regional companies showcasing various industries including local culture, entrepreneurship, global import/export, and international business. The selected location, schedule, costs associated with the trip, and additional course travel details will be on the schedule and online at [buscis.fullcoll.edu](http://buscis.fullcoll.edu). (Degree Credit) (CSU)

**BUS 108 F Living in an Online World****3 Units**

54 hours lecture per term. This course considers human behavior in relation to the challenges and opportunities presented by an increasingly online society. It places special emphasis on critically evaluating and managing one's online presence within this environment in a healthy way throughout various life stages. This course explores various aspects of our lives: physical, mental, emotional, and social consequences and opportunities for individuals, companies, and societies that result from the global use of the Internet in everyday personal and business life. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 110 F Business English****3 Units**

54 hours lecture per term. This course is an English review course intended for the business student. Practice is provided in essentials of grammar, punctuation, English usage, capitalization, number usage, sentence structure, and spelling. Principles of letter writing are introduced. (CSU)

**BUS 111 F Business Communications****3 Units**

**Prerequisite(s):** ENGL 060 F or ENGL 099 F or ESL 186 F, with a grade of Pass or a recommended score on the English Placement Test.

54 hours lecture per term. This course provides instruction and practice in writing in English usage, writing business letters, interoffice memoranda, and reports, Business English, mechanics, and appearance. Included are letters of inquiry, order and acknowledgement, sales, application, claims and adjustment and collection. One original research report is required. Meeting the needs of the readers underlies each section of study. (Degree Credit) (CSU) CSU GE, AA GE

**BUS 112 F Public Speaking for Business****4 Units**

**Advisory:** ENGL 100 F or ENGL 100HF or BUS 111 F, with a grade of C or better, or recommended score on the English Placement test.

72 hours lecture per term. This course is an introduction to public speaking and presentation methods. This course covers a variety of business-related public speaking styles and formats. Emphasis will be placed on preparing logical, well-organized, accurate verbal communication. Critical evaluation, reporting and listening skills will also be a focus. Students will learn how to use technology to create audio-visual aids, as well as speaker outlines/notes and audience handouts to assist in their presentations. Presentations topics will be related to business. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 115 F Professional Business Etiquette****3 Units**

54 hours lecture per term. This course covers the business protocol and etiquette skills needed to be successful in the business workplace. This course teaches students to present with confidence and authority. Proper business protocol skills will be reviewed including proper introductions and handshakes, the proper etiquette for business dining, dressing for success, business meeting protocol, and technical etiquette skills, including business correspondence. Students will learn how to prepare for and execute an interview, starting with how to prepare a strong resume. (Degree Credit) (CSU)

**BUS 131 F Principles of International Business****3 Units**

54 hours lecture per term. This course provides an overview of the global business environment by examining the similarities and differences in comparison with the United States of doing business in various contemporary foreign cultural settings. It focuses on the differences of the economic, political, financial, and legal systems. It also discusses the ways of managing these differences through understanding the principles of marketing, exporting, financing, production, and human resource management in the context of a multicultural business environment. This course is recommended for all business management/international business majors. This course fulfills the Multicultural Educational Requirement for Graduation. (Degree Credit) (CSU) AA GE, CSU GE

**BUS 132 F Principles of Import and Export****3 Units**

54 hours lecture per term. This course provides a thorough and practical treatment of the importing and exporting activities involved in international trade. The course is designed to acquaint the student through a comprehensive approach to import/export as a continuous activity. It allows gaining firsthand how-to knowledge for those seeking to either get familiarized or work in the international trade industry, contemplating to start an import/export activity, or for managers wishing to expand their company's market opportunities. Special emphasis is placed on agencies involved, terms and conditions, documentation requirements and formalities, transportation, insurance, banking and finance, marketing, and sources of information. (CSU)

**BUS 151 F Business Mathematics****3 Units**

**Prerequisite(s):** MATH 020 F or any previous Algebra course with a grade of C or better or math skills clearance with a grade of C or Pass.

54 hours lecture per term. This course prepares students for mathematical concepts involving quantitative reasoning and analysis in management, finance, accounting, real estate, and other areas of business. This course content involves a thorough study of all aspects of business mathematics including basic computational skills, fractions, decimals, percentages, bank reconciliation, use of business formulas and equations, payroll, discounts, and markup/markdowns, simple and compound interest, present values analysis, annuities and sinking funds, credit, depreciation and inventory, payroll taxes, promissory notes, insurance, financial reports, and business statistics. (Degree Credit) (CSU) AA GE, CSU GE

- BUS 162 F Business Economics** **3 Units**  
54 hours lecture per term. This course covers economic principles and problems of today's business world are emphasized. An elementary and practical course intended to acquaint the student with the present-day operation of the American free enterprise system. Business terminology, price competition, labor problems, business cycles, national income, public and international finance, and government control are emphasized. This course provides an independent, business-related study of economics for the student of business management courses. (Degree Credit) (CSU) AA GE, CSU GE
- BUS 170 F Principles of E-Business** **3 Units**  
54 hours lecture per term. This course will provide a comprehensive introduction to the field of e-business and integration of the Internet into existing business, taking into consideration the four critical infrastructures: technology, capital, public policy and media. This course focuses on presenting a working definition and framework for the study and practice of electronic commerce, e-business and Internet integration strategies. (Degree Credit) (CSU)
- BUS 180 F Small Business Management** **3 Units**  
54 hours lecture per term. This course studies various small business enterprises including retail, wholesale, manufacturing, service, and home-based business. Factors in business success and advantages and disadvantages of business ownership are analyzed. This course covers the problems encountered in planning, starting and operating a small business, including financial sources, accounting information, marketing and other related information. (Degree Credit) (CSU)
- BUS 181 F The Entrepreneurial Mindset (formerly Business Plan Development)** **3 Units**  
54 hours lecture per term. This course is a study of social and business entrepreneurs throughout history and around the world. An exploration of the traits that enable entrepreneurs to thrive in vastly different culture and eras, and the important contributions made by these innovators. (Degree Credit) (CSU) AA GE
- BUS 182 F Mobile Applications for Business - APPs (formerly Doing Business Online)** **3 Units**  
*Advisory:* Familiarity with Adobe Dreamweaver and HTML  
54 hours lecture per term. This course is designed to teach the fundamental use of mobile applications for business and provides a foundation for building mobile apps in popular platforms. Students learn about general mobility concerns, available platforms and devices, market share, possibilities for mobile business apps, as well as how to acquire, install, and use existing mobile apps. Mobile apps for marketing, productivity and e-commerce are covered. (Degree Credit) (CSU)
- BUS 183 F Entrepreneurship: Hornet Startup Lab** **1 Unit**  
Pass/No Pass or Letter Grade option. 54 hours lab per term. This is a hands-on course for students that have entrepreneurial ideas, but need the tools and knowledge necessary for startup development, prototyping, launch, and sustainability. Business leadership training, experience, knowledge and practical experience in entrepreneurship and business. Completion of a small business planning class is highly recommended before registering for this class. (Degree Credit) (CSU)
- BUS 185 F Creativity Matters!** **3 Units**  
54 hours lecture per term. This course will increase the degree to which students recognize and nurture their creative potential in business and life. The course focuses on four aspects of creativity: the creative person, the creative process, the creative product, and the creative environment. It further emphasizes the interactive nature of these elements and provides for individual application in personal and professional settings. (Degree Credit) (CSU) AA GE, CSU GE
- BUS 186 F Funding Special Projects and New Ventures** **1 Unit**  
18 hours lecture per term. This course provides a comprehensive overview of the funding process for special projects including entrepreneurship, education, travel, product development, etc. with particular reference to researching, writing, and managing of a range of funding types. This course covers the range of possible funding solutions including grants, giving institutions, government, corporate, foundations, and social fundraising/crowd funding. Emphasis is on developing competitive proposals, accurate budgets, and appropriate systems to manage the project. (CSU)
- BUS 187 F Innovation and New Product Development** **3 Units**  
54 hours lecture per term. This course leads to in-depth understanding of the requirements, issues (including ethics and sustainability), and tools involved in the planning and development of new products and services. This course addresses determination of new product development strategies based on market needs. Students examine variables including number and diversity of products, product innovations, product design, prototyping, and testing for form, function, and the marketplace. (Degree Credit) (CSU)
- BUS 188 F Introduction to the Internet of Things Product Development** **3 Units**  
54 hours lecture per term. This course explores the Internet of Things (IoT) which is the fast-growing network of physical objects or "things" embedded with electronics, software, sensors, and connectivity to enable it to achieve greater value and service by exchanging data with the manufacturer, operator and/or other connected devices. Each thing is uniquely identifiable through its embedded computing system but is able to inter-operate within the existing Internet infrastructure. This course will prepare student-entrepreneurs to dream, develop, install, configure and maintain these devices for new product development. (Degree Credit) (CSU)
- BUS 201 F Financial Investments** **3 Units**  
54 hours lecture per term. This course provides a comprehensive study of stocks, bonds, and related securities that includes a detailed study of the nature of these securities and their markets. Emphasis is placed on personal investment objectives for growth, growth with incomes, and income with preservation of capital together with taxes that affect investment policy. (Degree Credit) (CSU) AA GE
- BUS 211 F Critical Reasoning and Writing for Business (formerly Writing for Business)** **3 Units**  
*Prerequisite(s):* ENGL 100 F or ENGL 100HF, with a grade of C or better  
54 hours lecture per term. This course refines communication skills and knowledge needed in organizations today. Emphasis will be placed on critical thinking and developing the ability to analyze, criticize and advocate ideas, to reason inductively and deductively and to reach well-supported factual or judgmental conclusions in writing. This course will include communication fundamentals; ethical, legal and multicultural issues; correspondence applications; employment communication; oral and non-verbal communication; report writing; management presentations; team/group building skills; research methods; critical thinking and running effective meetings and conferences. Computer-mediated applications will be presented throughout the course. (Degree Credit) (CSU) AA GE (C-ID: BUS 115)

**BUS 211HF Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business) 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better  
54 hours lecture per term. This is an intermediary course to communication skills and knowledge needed in organizations. This course will include communication fundamentals; ethical, legal and multicultural issues; correspondence applications; employment communication; oral and nonverbal communication; report writing; management presentations; team/group building skills; research methods; critical thinking and running effective meetings and conferences. Computer-mediated applications will be presented throughout the course. As an Honors course, this class will use enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. (Degree Credit) (CSU) AA GE (C-ID: BUS 115)

**BUS 224 F International Marketing 3 Units**

54 hours lecture per term. This course provides an analysis of worldwide marketing opportunities through a consideration of political, legal, economic, and cultural factors in the international context. Special emphasis will be placed on international market research, product development and positioning, pricing, distribution, and promotion. Recommended for students pursuing business management and international business degrees. (Degree Credit) (CSU)

**BUS 225 F International Management 3 Units**

54 hours lecture per term. This course provides practical knowledge with specific applications in international business management. Topics include import/export management, international financial management, foreign joint venture, foreign licensing and franchising, and counter trade. The course combines integrated text materials with carefully selected comprehensive case studies that are designed to demonstrate the practical experience of firms of all sizes as they come to grips with an increasingly competitive global environment. Recommended for students pursuing business management and international business degrees. (Degree Credit) (CSU)

**BUS 226 F International Finance 3 Units**

54 hours lecture per term. This course is designed to familiarize students with the basic tools and concepts of International Financial Management, including assessing the current economic environment, computing foreign exchange rates, analyzing foreign exchange risks, learning how to calculate time value of money of global assets, and considering current and prior issues impacting international finance. (Degree Credit) (CSU)

**BUS 228 F Study Abroad Experience 3 Units**

**Advisory:** A previous study abroad trip or experience living and traveling abroad.

54 hours lecture per term. This course will provide students with an opportunity to conduct a cross-cultural analysis between the US and their host country as a capstone to their previous study abroad experience. Topics will include understanding how cultural differences affect business, economy, and politics. Understanding how the experience creates global citizens and promotes peace and trade between cultures. Students will create tactics to add the experience to job prospects and career building. (Degree Credit) (CSU)

**BUS 240 F Legal Environment of Business 3 Units**

54 hours lecture per term. This course is an introduction to the legal environment in which a business firm operates. Topics include an introduction to the American legal system, contracts, torts, product liability, forms of business organization, trade regulation, labor law, environmental law, and international business law. (Degree Credit) (CSU) (UC Credit Limitation: BUS 240 F, BUS 240HF, BUS 245 F and BUS 246 F combined; maximum credit, one course) AA GE (C-ID: BUS 120)

**BUS 240HF Honors Legal Environment of Business 3 Units**

54 hours lecture per term. This Honors-enhanced course is an introduction to the legal environment in which a business firm operates. Topics include an introduction to the American legal system, contracts, torts, product liability, forms of business organization, trade regulation, labor law, environmental law, and international business law. As an Honors course, students will conduct independent legal research and prepare class presentations of court cases and legal arguments. This class will use the Socratic method of instruction. (Degree Credit) (CSU) (UC Credit Limitation: BUS 240 F, BUS 240HF, BUS 241AF and BUS 241BF combined; maximum credit, one course) AA GE (C-ID: BUS 120)

**BUS 242 F International Business Law 3 Units**

54 hours lecture per term. This course provides an introduction to the legal and cultural issues raised in formulating an international business strategy and engaging in international business transactions. Topics include international contracting, export-import, licensing and technology transfer, and sales of services. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) AA GE

**BUS 245 F Business Law I (formerly BUS 241AF) 3 Units**

54 hours lecture per term. This course is an introduction to business law principles and cases, including a review of the classes and sources of law, agencies for enforcement, court procedure, and civil and criminal liability. The major subject area studied is the law of contracts. A special study is made of sales of goods based upon the Uniform Commercial Code with emphasis placed on consumer protection. (Degree Credit) (CSU) (UC Credit Limitation) AA GE

**BUS 246 F Business Law II (formerly BUS 241BF) 3 Units**

54 hours lecture per term. This course is a continuation of BUS 245 F with emphasis on business organization. Areas of study include commercial paper, agency employment, partnerships, corporations, antitrust, securities, and bankruptcy law. (Degree Credit) (CSU) (UC Credit Limitation)

**BUS 251 F Business Finance 3 Units**

54 hours lecture per term. This is an introductory course to the field of finance, the focus is on the practical significance of the fundamental concepts of finance. The class will include the analysis of financial markets, financial statements, planning and control, working capital management, time value of money, valuation models, capital budgeting, dividend policy and mergers and acquisitions. (Degree Credit) (CSU)

**BUS 255 F Introduction to Business and Data Analytics 3 Units**

54 hours lecture per term. This course is an introductory business course designed to give an understanding of the complete analytics cycle. From determining requirements to extracting and disseminating information, this course will cover the process, technologies, applications, tools, and skills required to analyze data so that informed and timely decisions can be made. Students will learn the methodologies, techniques, and tools most commonly used in data analytics. Other topics include methods and tools for visualization, inference, forecasting, optimization, simulation, and data mining. Tools will include Excel, Qualtrics Survey Software and Tableau. (Degree Credit) (CSU)

**BUS 262 F Principles of Management 3 Units**

54 hours lecture per term. This course covers the principles, methods, and procedures essential to the successful management of human and financial resources. Planning, organizing, leading, controlling and the application of managerial skills are discussed. (Degree Credit) (CSU)



**BUS 266 F Human Relations in Organizations (formerly Human Relations in Business) 3 Units**

54 hours lecture per term. 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 behavioral science theories and principles. Topics include values, perception, motivation, conflict management, teamwork, and leadership. (Degree Credit) (CSU) AA GE

**BUS 267 F Principles of Supervision 3 Units**

54 hours lecture per term. This course is designed for first-line, new, or future managers covering the skills required to effectively supervise and manage employees in organizations. This class emphasizes the supervisors' need for a working understanding of the functions of management and the practical supervisory skills relating to employees, work teams, workplace diversity, ethics, and special concerns. Topics include the role and function of supervisors, recruitment and evaluation of workers, task delegation, motivation, employee discipline, training and professional development, conflict management, labor relations and legislation, communication, employee safety, and time management. (Degree Credit) (CSU)

**BUS 268 F Human Resource Management 3 Units**

54 hours lecture per term. This course is an introduction to the formulation and implementation of human resource policy concerned with the major aspects of how an organization deals with its people: how it acquires them, utilizes them, rewards them, and separates them. Explores how the personnel functions integrate with the overall strategy of the firm in determining the success of the business. (Degree Credit) (CSU)

**BUS 271 F Leadership and Business Ethics 3 Units**

54 hours lecture per term. This course focuses on leadership and ethics in business today. It addresses leadership models perspectives and practices, and the complexities and principles of ethical business issues. Leadership topics include leading and motivating individuals and work teams, workplace diversity, followership, self-assessment and skills development. Business ethics topics include ethical leadership and decision making, organizational value systems and identifying and developing tools needed to effectively deal with ethical dilemmas. (Degree Credit) (CSU)

**BUS 281 F The Business of Cannabis 3 Units**

54 hours lecture per term. This course examines the fast-growing industry of cannabis and explores the planning, marketing, and running of a legal cannabis business in California. It is designed for anyone looking to learn about the cannabis industry and what to look for to start a business within the industry. Emphasis is placed on the analysis and practical application of dispensary business operations, legal issues and compliance, accounting, and security. Students will prepare a business and marketing plan for startup cannabis businesses. (Degree Credit) (CSU)

**BUS 290 F Managerial Communications 3 Units**

54 hours lecture per term. This course covers a variety of communication challenges that typically arise in management and emphasizes the development of communication skills to successfully manage individuals and groups. Topics include leadership and management skills, developing work relationships, ethics, managing meetings, making presentations, interviewing, performance appraisals, negotiation, conflict resolution, using electronic communications technology, and group communication strategies. (Degree Credit) (CSU)

**BUS 295 F Business Internship (formerly BUS 061 F) 2-4 Units**

Pass/No Pass/Letter Grade option. 18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in Business. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards one unit per 75 hours of paid internship or one unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

**BUS 296 F Business Internship II 2-4 Units**

**Prerequisite(s):** BUS 295 F with a grade of C or better  
18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (Degree Credit) (CSU)

**BUS 297 F Business Internship III 2-4 Units**

**Prerequisite(s):** BUS 296 F with a grade of C or better  
18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)

**BUS 298 F Advanced Topics in Business 3 Units**

54 hours lecture per term. This course addresses current and emerging topics in management/business. Students research several management/business topics, integrate this research with material from other management and business courses, and recommend solutions, courses of action, or strategies for dealing with these issues. The topics addressed in this course will change over time as important issues in business, management, and/or society evolve. (Degree Credit) (CSU)

## Business Administration Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A03823

The **Business Administration Associate in Arts Degree** is designed for students planning to find employment in such areas as finance, marketing, economics, advertising, human resource management, business administration and management. The degree is designed to transfer to a four-year institution. Completion of this degree will allow faster completion of a four-year degree. This degree requires 18-22 units chosen from the list below.

Code	Title	Units
<b>Complete 18-22 units from the following list:</b>		<b>18-22</b>
ACCT 101AF	Financial Accounting	5
ACCT 101BF	Managerial Accounting	5
BUS 100 F	Introduction to Business	3
BUS 131 F	Principles of International Business	3
BUS 180 F	Small Business Management	3
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3

or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
BUS 240 F	Legal Environment of Business <sup>1</sup>	3
or BUS 245 F	Business Law I (formerly BUS 241AF)	
BUS 246 F	Business Law II (formerly BUS 241BF)	3
CIS 100 F	Introduction to Personal Computers	4
or CIS 111 F	Introduction to Information Systems	
or CIS 111HF	Honors Introduction to Information Systems	
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
ECON 102 F	Principles of Economics - Macro	3
or ECON 102HF	Honors Principles of Economics-Macro	
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
MATH 130 F	Calculus for Business	4
or MATH 151 F	Calculus I (formerly MATH 150AF)	
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MKT 100 F	Introduction to Marketing	3
<b>Total Units</b>		<b>18-22</b>

<sup>1</sup> The student is responsible for completing any necessary prerequisites.

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of business terminology..

**Outcome 2:** Classify, record, and summarize financial transactions in journals and ledgers, manually and/or with computerized accounting software.

**Outcome 3:** Identify basic computer concepts, terms and functions.

**Outcome 4:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

# Business Administration Associate in Science Degree for Transfer

## Requirements

PROGRAM CODE: 2S36799

The **Business Administration Associate in Science Degree for Transfer**, also called the Business Administration AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Business Administration. Ed Code Section 66746-66749 states students earning the Business Administration AS-T degree will be granted priority for admission as a Business Administration major to a CSU, as determined by the CSU campus to which the student applies. Business Administration prepares students to enter the job market with an ability to identify and solve business problems. Coursework provides a solid base of knowledge and understanding of fundamental business aspects, beginning with the basics, and emphasizing a foundation in marketing, advertising, management, human relations, finance, communication, writing, business law and international business. While a baccalaureate degree is recommended preparation for those considering business focused careers, the completion of this curriculum will demonstrate commitment to the business field and provide preparation for upper-division work. The

Business Administration AS-T Degree requires a total of 29-30 units of required courses and restricted electives from the categories as indicated below.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (19 units)</b>		<b>19</b>
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
ACCT 101BF	Managerial Accounting	5
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
or BUS 245 F	Business Law I (formerly BUS 241AF)	
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
ECON 102 F	Principles of Economics - Macro	3
or ECON 102HF	Honors Principles of Economics-Macro	
<b>List A: Select one of the following (4 units, 4 may be GE):</b>		<b>4</b>
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
or MATH 130 F	Calculus for Business	
<b>List B: Select two of the following (6-7 units):</b>		<b>6-7</b>
<i>Any course from List A not already chosen.</i>		
BUS 100 F	Introduction to Business	3
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
CIS 111 F	Introduction to Information Systems	4
or CIS 111HF	Honors Introduction to Information Systems	
<b>Total Units</b>		<b>29-30</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of business terminology.

**Outcome 2:** Classify, record, and summarize financial transactions in journals and ledgers, manually and/or with computerized accounting software.

**Outcome 3:** Identify basic computer concepts, terms and functions.

**Outcome 4:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Business Data Analytics Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40553

The **Business Data Analytics Certificate** is designed to provide students with an understanding of how analytics can help improve their decision-making in business. Students can discover a new way to look at data and identify insights, improve their ability to make predictions for the long term, and prescribe actions that make better business decisions. This certificate prepares a student for entry-level positions in management in the public and private sector area such as public accounting, manufacturing, small business, financial service, wholesale trades, government and more. Specialized training in data analytics enables students to meet the growing demands for analysis and interpretation of data. A minimum grade of C is required in each course taken. This certificate requires 16 units.

Code	Title	Units
<b>Required Courses (16 units)</b>		
BUS 255 F	Introduction to Business and Data Analytics	3
or CIS 201 F	Introduction to Python Programming	
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
ACCT 101BF	Managerial Accounting	5
ACCT 230 F	Excel for Accountants	3
or CIS 205 F	Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)	
<b>Total Units</b>		<b>16</b>

### Program Student Learning Outcomes

**Outcome 1:** Know the processes and algorithms over raw data for consumption.

**Outcome 2:** Assemble information from sources and interpret patterns and trends.

**Outcome 3:** Generate report based on the interpretation of the analysis.

## Business Management Associate in Science Degree

### Requirements

PROGRAM CODE: 2S08387

The **Business Management Associate in Science Degree** is designed to prepare students for employment in a business capacity. The focus of the program is skill building in the areas of communication, decision-making, planning, organizing, and evaluating. Emphasis on problem solving, leadership, and critical thinking skills is stressed to prepare students for

employment and or transfer to a four year college or university. This degree requires 24-28 units.

Code	Title	Units
<b>Select one MANAGEMENT course from the following (3 units):</b>		
BUS 100 F	Introduction to Business	3
BUS 131 F	Principles of International Business	3
BUS 180 F	Small Business Management	3
<b>Select one ACCOUNTING course from the following (3-5 units):</b>		
ACCT 100 F	Small Business Accounting	3
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
<b>Select one COMMUNICATIONS course from the following (3-4 units):</b>		
BUS 111 F	Business Communications	3
BUS 112 F	Public Speaking for Business	4
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Select one ECONOMICS course from the following (3 units):</b>		
BUS 162 F	Business Economics	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
BUS 251 F	Business Finance	3
<b>Select one LAW course from the following (3 units):</b>		
<i>(See counselor for determination of correct course)</i>		
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>Select one MARKETING course from the following (3 units):</b>		
MKT 100 F	Introduction to Marketing	3
MKT 151 F	Digital Marketing (formerly New Media)	3
BUS 224 F	International Marketing	3
<b>Select two LEADERSHIP courses from the following (6-7 units):</b>		
BUS 112 F	Public Speaking for Business	4
BUS 225 F	International Management	3
BUS 262 F	Principles of Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
BUS 267 F	Principles of Supervision	3
BUS 268 F	Human Resource Management	3
BUS 271 F	Leadership and Business Ethics	3
<b>Total Units</b>		<b>24-28</b>

### Program Student Learning Outcomes

**Outcome 1:** Utilize a working vocabulary of business terminology.

**Outcome 2:** Classify, record, and summarize financial transactions in journals and ledgers, manually and/or with computerized accounting software.

**Outcome 3:** Identify basic computer concepts, terms and functions.

**Outcome 4:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Business Management Certificate

### Requirements

**PROGRAM CODE:** 2C21256A

The **Business Management Certificate** is designed to prepare students for employment in a business capacity. The focus of the program is skill building in the areas of communication, decision-making, planning, organizing, and evaluating. Emphasis on problem solving, leadership, and critical thinking skills is stressed to prepare students for employment. A grade of C or better is required in each course taken. This certificate requires 24-28 units.

Code	Title	Units
<b>Select one MANAGEMENT course from the following (3 units):</b>		<b>3</b>
BUS 100 F	Introduction to Business	3
BUS 131 F	Principles of International Business	3
BUS 180 F	Small Business Management	3
<b>Select one ACCOUNTING course from the following (3-5 units):</b>		<b>3-5</b>
ACCT 100 F	Small Business Accounting	3
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
<b>Select one COMMUNICATIONS course from the following (3-4 units):</b>		<b>3-4</b>
BUS 111 F	Business Communications	3
BUS 112 F	Public Speaking for Business	4
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Select one ECONOMICS course from the following (3 units):</b>		<b>3</b>
BUS 162 F	Business Economics	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
BUS 251 F	Business Finance	3
<b>Select one LAW course from the following (3 units):</b>		<b>3</b>
<i>(See counselor for determination of correct course)</i>		
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>Select one MARKETING course from the following (3 units):</b>		<b>3</b>
MKT 100 F	Introduction to Marketing	3
MKT 151 F	Digital Marketing (formerly New Media)	3
BUS 224 F	International Marketing	3
<b>Select two LEADERSHIP courses from the following (6-7 units):</b>		<b>6-7</b>
BUS 112 F	Public Speaking for Business	4
BUS 225 F	International Management	3
BUS 262 F	Principles of Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
BUS 267 F	Principles of Supervision	3
BUS 268 F	Human Resource Management	3

BUS 271 F Leadership and Business Ethics 3

**Total Units** 24-28

### Program Student Learning Outcomes

**Outcome 1:** Identify the various marketing functions (product development, pricing, promotion, and distribution) and how organizations utilize these to produce goods and services that satisfy the needs and wants of the consumer.

**Outcome 2:** Use a working vocabulary of business terminology.

**Outcome 3:** Identify basic computer concepts, terms and functions.

**Outcome 4:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Business Networking and Sales Certificate

**Division:** Business and Computer Information Systems

### Requirements

**PROGRAM CODE:** 2C40973

The **Business Networking and Sales Certificate** is designed to prepare students for employment in any business. The opposite of networking is not working. And, when developed correctly, it can be a most important business skill. Every time you meet someone, there is an opportunity to learn from them and be a resource to them. In sales, networking is a necessary skill for finding new clients and centers of influence and building a strong referral pipeline. It is also a strategy used to open doors and build powerful relationships. This program is designed for future professionals who are individual members of a team and for those who manage a team or the sales function of a business; For sales managers or executives looking to effectively coach your team and build a high-performing sales engine; Entrepreneurs looking to build a sales team and acquire customers; Business leaders who would like to be more persuasive and influential; Business development professionals who play a role in sales and managing relationships; and Professionals making a horizontal career shift into sales from another functional role. This certificate requires 12-15 units.

Code	Title	Units
<b>Required Courses (12-15 units):</b>		
MKT 208 F	Principles of Selling	3
PE 115 F	Golf	1
or PE 139 F	Tennis	
BUS 111 F	Business Communications	3-4
or BUS 112 F	Public Speaking for Business	
or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
BUS 115 F	Professional Business Etiquette	3
BUS 295 F	Business Internship (formerly BUS 061 F)	2-4
<b>Total Units</b>		<b>12-15</b>

## Program Student Learning Outcomes

**Outcome 1:** Simulate selling and persuasion skills.

## Business Skills Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C11688

The **Business Skills Certificate (formerly titled Business and Technology Certificate)** will prepare a student with practical business skills in a field of their choice. This certificate provides the professional skills to compete in today's workplace. Students can give their career a boost by mastering people and process expertise in areas like communication, critical thinking, finance, leadership, negotiation and problem solving. A grade of C or better is required in each course taken. This certificate requires a total of 12-15 units.

Code	Title	Units
<b>Select one BUSINESS course from the following (3 units):</b>		<b>3</b>
BUS 100 F	Introduction to Business	3
or BUS 131 F	Principles of International Business	
or BUS 180 F	Small Business Management	
<b>Select one COMMUNICATION course from the following (3-4 units):</b>		<b>3-4</b>
BUS 111 F	Business Communications	3
or BUS 112 F	Public Speaking for Business	
or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Select one FINANCIAL MANAGEMENT course (3-5 units):</b>		<b>3-5</b>
BUS 101 F	Personal Financial Management	3
or ACCT 100 F	Small Business Accounting	
or ACCT 101AF	Financial Accounting	
<b>Select one MARKETING class from the following (3 units):</b>		<b>3</b>
MKT 100 F	Introduction to Marketing	3
or MKT 208 F	Principles of Selling	
<b>Total Units</b>		<b>12-15</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of business technology.

**Outcome 2:** Analyze a routine business request and respond with the best method that illustrates good business communication skills.

## Digital Marketing Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C39439

The **Digital Marketing Certificate** is designed for students who intend to seek immediate employment in the field of digital marketing and/or business, and those presently employed in digital marketing but seeking

advancement. Digital marketers are in high demand, but it is a crowded field. This program helps you to differentiate yourself with multi-platform fluency and real-world experience with the most important tools and platforms. This unique program ensures you learn exactly the skills you'll need to succeed. Graduates of this program may be employed in a number of jobs and career areas such as social media manager, advertising specialist, digital marketer, and digital marketing specialist. This program may be complemented by also enrolling in BUS 295 F (Business Internship). A minimum grade of C is required in each course taken. This certificate requires a total of 18 units.

Code	Title	Units
<b>Required Courses (9 units):</b>		
BUS 170 F	Principles of E-Business	3
CIS 152 F	Web Design I (formerly Web Page Design II)	3
MKT 151 F	Digital Marketing (formerly New Media)	3
<b>Select from the following courses (9 units):</b>		<b>9</b>
MKT 160 F	Introduction to Digital Marketing	1
MKT 161 F	Web Design for Digital Marketing	1
MKT 162 F	Search Engine Optimization	1
MKT 163 F	Search Engine Marketing	1
MKT 164 F	Online Advertising	1
MKT 165 F	Content Considerations for Digital Marketing	1
MKT 166 F	Social Media Marketing	1
MKT 167 F	Email Marketing	1
MKT 168 F	Digital Analytic Tools	1
MKT 169 F	Digital Marketing Capstone - Strategy and Execution	1
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Utilize a working vocabulary of digital marketing technology.

**Outcome 2:** Create a basic digital marketing plan for a small business.

# Entrepreneurship Associate in Science Degree

## Requirements

PROGRAM CODE: 2S08388

The **Entrepreneurship Associate in Science Degree** is designed to prepare students with key considerations for starting and managing a business. Everyone can be an Entrepreneur. We will guide students step-by-step through solid business planning. Upon program completion, students will have a business plan and the operational skills necessary to start or expand a business. This degree requires 22-25 units.

Code	Title	Units
<b>IDEATION AND ENTREPRENEURSHIP CORE COURSES</b>		
<i>Required Courses (6 units):</i>		
BUS 187 F	Innovation and New Product Development	3
or BUS 188 F	Introduction to the Internet of Things Product Development	
or BUS 185 F	Creativity Matters!	
BUS 180 F	Small Business Management	3
or BUS 181 F	The Entrepreneurial Mindset (formerly Business Plan Development)	
<b>ACCOUNTING COURSES</b>		
<i>Select one course from the following (3-5 units):</i>		
ACCT 100 F	Small Business Accounting	3
ACCT 101AF	Financial Accounting	5
ACCT 101BF	Managerial Accounting	5
<b>E-COMMERCE AND WEBSITE COURSES</b>		
<i>Select one course from the following (3 units):</i>		
BUS 170 F	Principles of E-Business	3
BUS 182 F	Mobile Applications for Business - APPs (formerly Doing Business Online)	3
CIS 152 F	Web Design I (formerly Web Page Design II)	3
<b>LEGAL COURSES</b>		
<i>Select one course from the following (3 units):<sup>1</sup></i>		
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>MANAGEMENT COURSES</b>		
<i>Select one course from the following (3-4 units):</i>		
BUS 112 F	Public Speaking for Business	4
or COMM 100 F	Public Speaking	
BUS 180 F	Small Business Management	3
BUS 262 F	Principles of Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
BUS 267 F	Principles of Supervision	3
BUS 268 F	Human Resource Management	3
BUS 271 F	Leadership and Business Ethics	3
<b>MARKETING COURSES</b>		
<i>Select one course from the following (3 units):</i>		
BUS 224 F	International Marketing	3
MKT 103 F	Principles of Advertising	3

MKT 151 F	Digital Marketing (formerly New Media)	3
MKT 201 F	Small Business Promotions	3
<b>ENTREPRENEURSHIP SPECIAL TOPICS</b>		
<i>Select one course from the following (1 unit):</i>		
BUS 186 F	Funding Special Projects and New Ventures	1
<b>Total Units</b>		<b>22-25</b>

<sup>1</sup> See counselor for determination of correct course.

## Program Student Learning Outcomes

**Outcome 1:** Define, identify and/or apply the principles of entrepreneurial management and growth through strategic plans, consulting projects and/or implementing their own businesses.

**Outcome 2:** Utilize a working vocabulary of business terminology..

**Outcome 3:** Define, identify and/or apply the principles of viability of businesses, new business proposals, and/or find opportunities within new/existing businesses.

## Entrepreneurship Certificate

### Requirements

PROGRAM CODE: 2C21257

The **Entrepreneurship Certificate** is designed to prepare students with key considerations for starting and managing a business. We will guide you step-by-step through solid business planning. Upon program completion, students will have a business plan and the skills necessary to seek funding to start or expand a business. A grade of C or better is required in each course taken. This certificate requires 22-25 units.

Code	Title	Units
<b>Select IDEATION/ENTREPRENEURSHIP core courses from the following (6 units):</b>		
BUS 180 F	Small Business Management	3
or BUS 181 F	The Entrepreneurial Mindset (formerly Business Plan Development)	
BUS 185 F	Creativity Matters!	3
BUS 187 F	Innovation and New Product Development	3
BUS 188 F	Introduction to the Internet of Things Product Development	3
<b>Select one ACCOUNTING course from the following (3-5 units):</b>		
ACCT 001 F	Accounting for Small Business	3
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
<b>Select one E-COMMERCE/WEBSITE course from the following (3 units):</b>		
BUS 170 F	Principles of E-Business	3
BUS 182 F	Mobile Applications for Business - APPs (formerly Doing Business Online)	3
CIS 152 F	Web Design I (formerly Web Page Design II)	3
<b>Select one LEGAL course from the following (3 units):</b>		
<i>(See a counselor for determination of correct course)</i>		
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	

BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>Select one MANAGEMENT course from the following (3-4 units): 3-4</b>		
BUS 112 F	Public Speaking for Business	4
BUS 180 F	Small Business Management	3
BUS 262 F	Principles of Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
BUS 267 F	Principles of Supervision	3
BUS 268 F	Human Resource Management	3
BUS 271 F	Leadership and Business Ethics	3
<b>Select one MARKETING course from the following (3 units): 3</b>		
BUS 224 F	International Marketing	3
MKT 100 F	Introduction to Marketing	3
MKT 103 F	Principles of Advertising	3
MKT 151 F	Digital Marketing (formerly New Media)	3
MKT 201 F	Small Business Promotions	3
<b>Select one ENTREPRENEURSHIP SPECIAL TOPICS (ELECTIVES) course from the following (1 unit): 1</b>		
BUS 186 F	Funding Special Projects and New Ventures	1
<b>Total Units</b>		<b>22-25</b>

## Student Program Learning Outcomes

**Outcome 1:** Create a basic business plan for a small business.

**Outcome 2:** Utilize a working vocabulary of business terminology.

**Outcome 3:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Finance Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C41268

The **Finance Certificate** is designed to prepare students for employment in the financial services industry or who are responsible for making financial decisions. The focus of the program helps students to gain a solid foundation in the principles of finance, becoming well informed of topics critical to financial planning, implementation, measurement, and investment. Emphasis on building advanced knowledge of economic theory, corporate finance, mergers and acquisitions, international markets, and risk management to prepare students for employment. A grade of C or better is required in each course taken. This certificate requires 18-19 units.

Code	Title	Units
<b>Select from the following (9 units): 9</b>		
BUS 101 F	Personal Financial Management	3
BUS 201 F	Financial Investments	3
or BUS 251 F	Business Finance	
or RE 202 F	Real Estate Finance	
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
or BUS 245 F	Business Law I (formerly BUS 241AF)	
<b>Select from the following (9-10 units): 9-10</b>		

BUS 162 F	Business Economics	3
BUS 201 F	Financial Investments	3
BUS 251 F	Business Finance	3
BUS 226 F	International Finance	3
BUS 186 F	Funding Special Projects and New Ventures	1
RE 202 F	Real Estate Finance	3
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
<b>Total Units</b>		<b>18-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of business and finance terminology.

**Outcome 2:** Develop an understanding of the theory and practice of corporate finance with an understanding of discounted cash flow, valuation, risk and return, capital asset pricing model, corporate capital structure, capital budgeting, mergers and acquisitions, and investment and financing decisions.

## Human Resources Management Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40964

The **Human Resources Management Certificate** prepares students to manage and develop human capital in a business organization. This includes instruction related to personnel and organization policy, human resources dynamics and flows, labor relations, civil rights, human resources law, recruitment and selection, employee related job training programs, and management of human resources programs and operations. This certificate requires 18-19 units.

Code	Title	Units
<b>Required Courses (9 units):</b>		
BUS 262 F	Principles of Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
BUS 268 F	Human Resource Management	3
<b>Select three courses from the following (9-10 units): 9-10</b>		
ACCT 110 F	Payroll Accounting	3
BUS 101 F	Personal Financial Management	3
BUS 111 F	Business Communications	3
or BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
BUS 112 F	Public Speaking for Business	4
BUS 115 F	Professional Business Etiquette	3
BUS 225 F	International Management	3
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	

BUS 267 F	Principles of Supervision	3
BUS 271 F	Leadership and Business Ethics	3
<b>Total Units</b>		<b>18-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Analyze and identify training and development functions within human resources management.

**Outcome 2:** Design and evaluate an effective employee evaluation instrument.

**Outcome 3:** Compile human resource management techniques and evaluate and discuss the pros and cons of each with respect to various management situations.

## International Business Management Associate in Science Degree

### Requirements

PROGRAM CODE: 2S08391

The **International Business Management Associate in Science Degree** is designed to prepare students for meaningful employment in organizations with an international footprint, to include skills and abilities in importing, exporting, and international marketing and management functions. Studies in international business focus on how different cultures affect the political, economic, and social aspects of doing business internationally. If students want to work abroad, they can consider adding the Fullerton College's optional Study Abroad program, offered every semester, which will connect them to new cultural and educational experiences. This degree requires 27-31 units.

Code	Title	Units
<b>Required Courses (15-16 units):</b>		<b>15-16</b>

*Students are encouraged to participate in the Study Abroad Program and may also count their Study Abroad semester towards this degree.*

BUS 131 F	Principles of International Business	3
BUS 132 F	Principles of Import and Export	3
BUS 224 F	International Marketing	3
BUS 225 F	International Management	3
BUS 226 F	International Finance	3
BUS 242 F	International Business Law	3
INDS 298AF	Interdisciplinary Studies Seminar for Study Abroad	1

#### Accounting Courses (3-5 units): 3-5

ACCT 100 F	Small Business Accounting	3
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	

#### Communications Courses (3-4 units): 3-4

BUS 111 F	Business Communications	3
BUS 112 F	Public Speaking for Business	4
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	

#### Management Courses (3 units):<sup>1</sup> 3

BUS 100 F	Introduction to Business	3
BUS 131 F	Principles of International Business	3
BUS 180 F	Small Business Management	3
BUS 262 F	Principles of Management	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
BUS 267 F	Principles of Supervision	3
BUS 268 F	Human Resource Management	3
BUS 271 F	Leadership and Business Ethics	3

#### Legal Courses (3 units):<sup>1</sup> 3

BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 242 F	International Business Law	3
BUS 245 F	Business Law I (formerly BUS 241AF)	3

**Total Units** 27-31

<sup>1</sup> See counselor for determination of correct course.

## Program Student Learning Outcomes

**Outcome 1:** Analyze a country with consideration of political economy and culture, and evaluate its strengths and weaknesses for the global marketplace.

**Outcome 2:** Use a working vocabulary of business terminology.

**Outcome 3:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## International Business Management Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40645

The **International Business Management Certificate** is designed to prepare students for various aspects of international management. Topics include the challenges of managing international organizations, the impact of culture on organizations, and the management of cultural diversity at home and abroad. If you think you want to work abroad, consider adding the Fullerton College's optional Study Abroad program, offered every semester, which will connect you to new cultural and educational experiences. A grade of C or better is required in each course taken. This certificate requires 18-19 units.

NOTE: Students are encouraged to participate in Study Abroad and may also count their Study Abroad semester towards this certificate.

Code	Title	Units
<b>Required Courses (18-19 units):</b>		<b>18-19</b>

BUS 131 F	Principles of International Business	3
BUS 132 F	Principles of Import and Export	3
BUS 224 F	International Marketing	3
BUS 225 F	International Management	3
BUS 226 F	International Finance	3
BUS 242 F	International Business Law	3



INDS 298AF	Interdisciplinary Studies Seminar for Study Abroad	1
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**Total Units** 18-19

## Program Student Learning Outcomes

**Outcome 1:** Analyze a country from aspects of political economy and culture and evaluate its strengths and weaknesses for the global marketplace.

**Outcome 2:** Use a working vocabulary of business terminology.

**Outcome 3:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## International Business Skills Certificate

### Requirements

PROGRAM CODE: 2C21258A

The **International Business Skills Certificate** is designed to develop students' skills in doing business internationally, and to develop an understanding of the nature of globalization and the differences in cultures and business practices. A grade of C or better is required in each course taken. This certificate requires 9 units.

Code	Title	Units
<b>Required Courses (6 units):</b>		
BUS 131 F	Principles of International Business	3
BUS 132 F	Principles of Import and Export	3
<b>Restricted Electives: Select one course from the following (3 units):</b>		
BUS 224 F	International Marketing	3
BUS 225 F	International Management	3
BUS 226 F	International Finance	3
BUS 242 F	International Business Law	3
<b>Total Units</b>		<b>9</b>

## Program Student Learning Outcomes

**Outcome 1:** Analyze a country from aspects of political economy and culture and evaluate its strengths and weaknesses for the global marketplace.

**Outcome 2:** Utilize a working vocabulary of business terminology.

**Outcome 3:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Mobile Applications Entrepreneur Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40676

The **Mobile Applications Entrepreneur Certificate** provides students with a foundation for the development of phone and tablet mobile

applications. The curriculum emphasizes the basics of mobile application strategy, design and development using operating systems such as Apple and Android. The certificate also focuses on an understanding of entrepreneurship and business operations. Students will learn the planning, programming and marketing of mobile applications. A grade of C or better is required in each course taken. This certificate requires 16-17 units.

Code	Title	Units
<b>Required Courses (13-14 units):</b>		
BUS 170 F	Principles of E-Business	3
BUS 182 F	Mobile Applications for Business - APPs (formerly Doing Business Online)	3
CIS 201 F or CIS 226 F	Introduction to Python Programming Java Programming I	3
CIS 240 F	Intro to Mobile Applications	4
<b>Restricted Electives (3 units):</b>		<b>3-4</b>
BUS 180 F	Small Business Management	3
BUS 181 F	The Entrepreneurial Mindset (formerly Business Plan Development)	3
BUS 185 F	Creativity Matters!	3
BUS 187 F	Innovation and New Product Development	3
BUS 188 F	Introduction to the Internet of Things Product Development	3
<b>Total Units</b>		<b>16-17</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate effective communication solutions to business problems using appropriate language and tools and demonstrating understanding of business terms and concepts.

**Outcome 2:** Analyze and recommend effective business decisions/solutions using a systematic, evaluative, and information-based approach.

**Outcome 3:** Develop, design and deploy mobile apps for gaming, business, productivity, personal use, and education.

## Retail Management Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C36705

The **Retail Management Certificate** will prepare a student to obtain a supervisory position in a retail business. Beginning as a clerk or cashier, the student can advance to assistant manager, manager, and upper management. A minimum grade of C is required in each course taken. This certificate requires 31-33 units.

Code	Title	Units
<b>Required Courses (9 units)</b>		
BUS 267 F	Principles of Supervision	3
MKT 100 F	Introduction to Marketing	3
MKT 203 F	Principles of Retail Management	3
<b>One course from the following for total of 3-5 units:</b>		<b>3-5</b>
ACCT 001 F	Accounting for Small Business	3
ACCT 100BF	Financial Accounting Principle	3

ACCT 101AF	Financial Accounting	5
<b>One course from the following for a total of 3 units:</b>		<b>3</b>
BUS 100 F	Introduction to Business	3
BUS 180 F	Small Business Management	3
<b>One course from the following for a total of 3 units:</b>		<b>3</b>
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>Two courses from the following for a total of 6 units:</b>		<b>6</b>
MKT 103 F	Principles of Advertising	3
MKT 151 F	Digital Marketing (formerly New Media)	3
MKT 201 F	Small Business Promotions	3
MKT 208 F	Principles of Selling	3
<b>One course from the following for a total of 3 units:</b>		<b>3</b>
BUS 110 F	Business English	3
BUS 111 F	Business Communications	3
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
<b>One course from the following for a total of 4 units:</b>		<b>4</b>
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
CIS 111 F	Introduction to Information Systems	4
or CIS 111HF	Honors Introduction to Information Systems	
<b>Total Units</b>		<b>31-33</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of business terminology.

**Outcome 2:** Classify, record and summarize financial transactions in journals and ledgers, manually and/or with computerized accounting software.

**Outcome 3:** Identify basic computer concepts, terms and functions.

**Outcome 4:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## The Business of Art Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40675

The **Business of Art Certificate** combines business coursework in entrepreneurship, marketing and accounting with courses focused on studio arts, art management and leadership practices for a self-employed career in Art. Students examine methods for sustaining a self-directed career in the arts and for making their art viable in the marketplace. A grade of C or better is required in each course taken. This certificate requires a total of 18 units.

Code	Title	Units
<b>Required Entrepreneurship Courses (9 units):</b>		
ACCT 100 F	Small Business Accounting	3
ART 123 F	Business Practices in Art	3
or MKT 201 F	Small Business Promotions	
BUS 180 F	Small Business Management	3

or BUS 181 F	The Entrepreneurial Mindset (formerly Business Plan Development)	
<b>Art Module Courses (select 9 units from one module listed below):</b>		<b>9</b>
<i>Painter Module</i>		
ART 202 F	Advanced Painting I	3
ART 203 F	Advanced Painting II	3
ART 290 F	Portfolio Preparation and Artwork Presentation	3
<i>Sculptor Module</i>		
ART 121 F	Three-Dimensional Design	3
ART 161 F	Advanced Sculpture	3
ART 268 F	Advanced Sculpture II	3
<i>Jeweler Module</i>		
ART 121 F	Three-Dimensional Design	3
ART 274 F	Advanced Jewelry Casting	3
ART 276 F	Advanced Jewelry Fabrication	3
<i>Ceramist Module</i>		
ART 121 F	Three-Dimensional Design	3
ART 155 F	Intermediate Ceramics	3
ART 254 F	Advanced Ceramics	3
<i>Tile Module</i>		
ART 120 F	Basic Design	3
ART 121 F	Three-Dimensional Design	3
ART 260 F	Tile III	3
<i>Gallery Module</i>		
ART 122 F	Museum Studies - Introduction to Gallery Practices	3
ART 124 F	Museum Studies - Exhibition Production	3
ART 125 F	Museum Studies - Exhibition Design and Careers	3
<i>Illustrator Module</i>		
ART 222 F	Composition for Artists: Elements and Principles	3
ART 246 F	Advanced Illustration	3
ART 290 F	Portfolio Preparation and Artwork Presentation	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Analyze ways to create a livelihood in a chosen arts discipline by identifying a unique, self-directed, non-traditional, and entrepreneurial pathway.

**Outcome 2:** Develop skills in marketing, self-promotion, and business planning.

**Outcome 3:** Use a working vocabulary of small business terminology.

# Chemistry

Division: Natural Sciences

## Faculty

Mohd Ansari  
Annie Bianchino  
Theodore Chan  
Guy Dadson  
Christopher Fernandez  
Samuel Foster  
Americo Fraboni  
Laura Lazarus  
Stephanie Nobles  
Iris Rauda  
Bridget Salzameda  
Mohammad Shahin  
Tilahun Yimenu

## Degrees and Certificates

- Chemistry Associate in Arts Degree (p. 268)
- Chemistry Associate in Science Degree (p. 268)
- Chemistry Associate in Science Degree for Transfer (p. 268)

## Courses

### CHEM 100 F Chemistry for Daily Life 4 Units

54 hours lecture and 54 hours lab per term. This course focuses on the practical significance of the fundamental concepts of chemistry in the context of societal, political and economic issues that impact our world. Units may include, but are not limited to the following: the chemistry of the atmosphere and water, fission and fusion, energy, chemistry, and society, pharmaceutical, new materials, the chemistry of nutrition and agriculture. Student participation is stressed individually and in groups, through written and oral assignments. The laboratory provides hands-on experience with chemical phenomena. This course is designed for the non-science major seeking a lab science. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC

### CHEM 101 F Chemistry for Allied Health Science 5 Units

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance.

72 hours lecture, 54 hours lab and 18 hours problem solving per term. This course provides an introduction to the principles of inorganic and organic chemistry. This course includes a lab and will meet physical science transfer requirements. This is a course required of numerous allied health science majors. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC (C-ID: CHEM 101, CHEM 140)

### CHEM 103 F Chemistry in a Changing World 3 Units

54 hours lecture per term. This course is intended for non-science students seeking general education credit in a physical science course without a laboratory. Course emphasizes basic principles of chemistry and their relationship to the modern world. This course will foster an interest in science by preparing student to make effective decisions, and by developing thinking skills that can be applied to challenges in a changing world. Topics include air and water pollution, energy resources, basic biochemistry, and current scientific developments involving chemistry. (Degree Credit) (CSU) (UC Credit Limitation: no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC

### CHEM 107 F Preparation for General Chemistry 5 Units

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance

72 hours lecture, 54 hours lab and 18 hours problem solving per term. This course is strongly recommended for students who have not had high school chemistry or who earned a grade of C or less in the high school course. The fundamental principles of chemistry are stressed, with emphasis on the chemistry of inorganic compounds. Includes atomic structure, chemical bonding, descriptive chemistry, stoichiometry, gas laws, solutions, equilibrium and redox. This course is intended to prepare students specifically for CHEM 111AF and CHEM 111BF. Lab work supports topics of CHEM 107 F. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) AA GE, CSU GE, IGETC

### CHEM 111AF General Chemistry I 5 Units

**Prerequisite(s):** CHEM 107 F with a grade of C or better or a passing score on the Chemistry Proficiency Test and MATH 040 F with a grade of C or better or math skills clearance.

54 hours lecture, 54 hours lab, 36 hours problem solving and 18 hours discussion per term. This course covers the topics of chemical reactions and stoichiometry, thermochemistry and calorimetry, atomic structure and chemical periodicity, chemical bonding, molecular structure, gases, physical properties of solids, liquids and solutions, and organic chemistry. The laboratory sequence will support the above topics including both qualitative and quantitative experiments, analysis of data and error propagation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: CHEM 110, CHEM 120S)

### CHEM 111BF General Chemistry II 5 Units

**Prerequisite(s):** CHEM 111AF with a grade of C or better

54 hours lecture, 54 hours lab, 36 hours problem solving and 18 hours discussion per term. This course covers the topics of kinetics, equilibria, acid and bases, thermodynamics, electrochemistry, transition metals, coordination compounds and nuclear chemistry. The laboratory sequence will support the above topics including both qualitative and quantitative experiments, analysis of data and error propagation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: CHEM 120S)

### CHEM 201 F Biochemistry for Allied Health Science 5 Units

**Prerequisite(s):** CHEM 101 F with a grade of C or better

72 hours lecture, 36 hours lab, 18 hours problem solving and 18 hours discussion per term. This course is the second semester of a two semester sequence (CHEM 101 F and CHEM 201 F). This course is a study of organic chemistry: structures, nomenclature, reactions and functions of organic and biochemical compounds; cell structure, metabolism, bioenergetics, biochemical genetics, and mechanisms of vitamin and enzyme action. This course is designed for the health professions. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: CHEM 102)

### CHEM 211AF Organic Chemistry I 5 Units

**Prerequisite(s):** CHEM 111BF with a grade of C or better

54 hours lecture, 72 hours lab and 36 hours discussion per term. This course is the first part of a full year organic chemistry course designated primarily for chemistry majors but strongly recommended for pre-medical, pre-dental, pre-veterinary, pre-chiropractic, and biology majors. Emphasis is upon fundamental concept and application to molecular structure and chemical reactivity. Considerable stress is placed upon reaction mechanism, energetics, syntheses, stereochemistry, and molecular spectroscopy. Laboratory work includes techniques such as distillation, extraction, chromatography, and synthesis and qualitative analysis. (Degree Credit) (CSU) (UC Credit Limitation) (C-ID: CHEM 150, CHEM 160s)

**CHEM 211BF Organic Chemistry II****5 Units**

**Prerequisite(s):** CHEM 211AF with a grade of C or better, 54 hours lecture, 72 hours lab and 36 hours discussion per term. This course is the second part of a full year organic chemistry course designed primarily for chemistry majors but strongly recommended for pre-medical, pre-dental, pre-veterinary, pre-chiropractic, and biology majors. Aliphatic and aromatic compounds are integrated with the functional group approach maintained. Considerable emphasis is placed upon reaction mechanism, energetics, syntheses, stereochemistry, and spectroscopy. Lab work is on synthesis and qualitative analysis employing techniques learned in CHEM 211AF. (Degree Credit) (CSU) (UC) (C-ID: CHEM 160S)

## Chemistry Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03873

The **Chemistry Associate in Arts Degree** prepares students for further study in chemistry or related physical and life science disciplines. This degree will provide a background in general chemistry while providing skills for possible entry-level employment in science-related industries or laboratories. This degree requires 18-20 units of which 10 units are in required courses, and 8-10 units must be chosen from the restricted electives listed below.

Code	Title	Units
<b>Required Courses (10 units):</b>		<b>10</b>
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
<b>Restricted Electives (8-10 units):</b>		<b>8-10</b>
CHEM 211AF	Organic Chemistry I	5
CHEM 211BF	Organic Chemistry II	5
MATH 151 F	Calculus I (formerly MATH 150AF)	4
	or MATH 151HF Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
	or MATH 152HF Honors Calculus II	
PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II	4
PHYS 210 F	Physics with Calculus for the Life Sciences I	4
PHYS 211 F	Physics with Calculus for the Life Sciences II	4
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
<b>Total Units</b>		<b>18-20</b>

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate knowledge of inorganic chemistry appropriate for general chemistry and have the ability to articulate this chemical knowledge in verbal, written, and/or computational form.

**Outcome 2:** Demonstrate the ability to conduct experiments, analyze data, and interpret results, while observing responsible and ethical scientific conduct.

**Outcome 3:** Demonstrate the use of proper procedures and regulations for safe handling and use of chemicals.

## Chemistry Associate in Science Degree

### Requirements

PROGRAM CODE: 2S35174

The **Chemistry Associate in Science Degree** is designed to prepare students for further study in the sciences, in particular chemistry. It may also support attempts to gain entry-level employment in government agencies or various areas of industry, including environmental, pharmaceutical, and material chemistry. The Chemistry Associate in Science Degree requires 20 units of required courses.

Code	Title	Units
<b>Required Courses (20 units):</b>		
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
CHEM 211AF	Organic Chemistry I	5
CHEM 211BF	Organic Chemistry II	5
<b>Total Units</b>		<b>20</b>

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate knowledge of inorganic and organic chemistry and have the ability to articulate this chemical knowledge in verbal, written, and/or computational form.

**Outcome 2:** Demonstrate the ability to conduct experiments, analyze data, and interpret results, while observing responsible and ethical scientific conduct.

**Outcome 3:** Demonstrate the use of proper procedures and regulations for safe handling and use of chemicals.

## Chemistry Associate in Science Degree for Transfer

### Requirements

PROGRAM CODE: 2S36798

The **Chemistry Associate in Science Degree for Transfer**, also called the Chemistry AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in chemistry. Ed Code Section 66746-66749 states students earning the Chemistry AS-T degree will be granted priority for admission as a Chemistry major to a local CSU, as determined by the CSU campus to which the student applies. The Chemistry AS-T introduces students to general and organic chemistry, preparing students for further study in the discipline of chemistry. Coursework includes instruction in molecular-level interpretations regarding the properties and reactions of inorganic and organic substances. Students with a degree in chemistry may pursue careers in government agencies or various areas of industry, including environmental, pharmaceutical, and material chemistry. The Chemistry AS-T Degree requires a total of 36 units of required courses as indicated below.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) for STEM and the California State University General Education – Breadth for STEM Requirements (p. 35) (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core (36 units):</b>		<b>36</b>
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
CHEM 211AF	Organic Chemistry I	5
CHEM 211BF	Organic Chemistry II	5
MATH 151 F	Calculus I (formerly MATH 150AF)	4
	or MATH 151HF Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
	or MATH 152HF Honors Calculus II	
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
<b>Total Units</b>		<b>36</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate knowledge of inorganic and organic chemistry and have the ability to articulate this chemical knowledge in verbal, written, and/or computational form.

**Outcome 2:** Demonstrate the ability to conduct experiments, analyze data, and interpret results, while observing responsible and ethical scientific conduct.

**Outcome 3:** Demonstrate the use of proper procedures and regulations for safe handling and use of chemicals.

## Child Development and Educational Studies

Division: Social Sciences

### Faculty

Thomas Chiaromonte  
Jennifer Kinkel  
Karin Pavelek

## Degrees and Certificates

- Child and Adolescent Development Associate in Arts Degree for Transfer (p. 272)
- Child Development and Educational Studies Associate in Arts Degree (p. 273)
- Early Childhood Education Administration Certificate (p. 273)
- Early Childhood Education Associate in Arts Degree (p. 274)
- Early Childhood Education Associate in Science Degree for Transfer (p. 274)
- Early Childhood Education Teacher Certificate (p. 275)
- Elementary Teacher Education Associate in Arts Degree for Transfer (p. 276)
- Infant and Toddler Teacher Certificate (p. 277)
- Special Education Certificate (p. 277)

## Courses

**CDES 115 F Introduction to Early Childhood Education Curriculum 3 Units**  
54 hours lecture per term. This course presents an overview of knowledge and skills related to developing and providing appropriate curriculum and environments for young children from birth to age six. Students will examine a teacher's role in supporting development and fostering the joy of learning for all young children using observation and assessment strategies emphasizing the essential role of play. An overview of content areas will include, but not be limited to Art, Science and Math, language and literacy, social and emotional development and creativity. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 130)

**CDES 116 F Art Education in Early Childhood (formerly CDES 123AF) 2 Units**  
36 hours lecture per term. This course examines the teacher's role in children's artistic growth. Emphasis is on the child as the artist, learner and creator of ideas. Students explore, analyze, and experience artistic studio processes that support children's use of art as a tool for communication, thinking, understanding and learning. Students will gain observational skills at the CDES Laboratory School classrooms. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**CDES 117 F Literacy and Language in Early Childhood (formerly CDES 123BF) 2 Units**  
36 hours lecture per term. This course examines the teacher's role in children's literacy development. Language development topics include: receptive and expressive, writing and reading, storytelling experiences. Students explore, analyze, practice and present literacy experiences to children that support their use of language and literacy techniques as a tool for child communication, understanding and comprehension. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. (Degree Credit) (CSU)

**CDES 118 F Science and Math Education in Early Childhood (formerly CDES 123CF) 2 Units**  
36 hours lecture per term. This course gives students insight, knowledge and techniques for designing scientific early childhood classroom environments that promote a constructivist approach. Emphasis is on the child as researcher, explorer and investigator. Students explore processes that promote in-depth science investigation and early math understanding including nature and gardening. Students gain observational skills at the CDES Laboratory School classrooms. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**CDES 119 F Music Education in Early Childhood (formerly CDES 123DF) 2 Units**

36 hours lecture per term. This course prepares students to create children's musical environments as they explore the elements of music. Both vocal and instrumental music are explored. The role of the teacher as community builder and bridge between music, relationships with the child and family is emphasized. (Degree Credit)(CSU)

**CDES 120 F Child Development 3 Units**

54 hours lecture per term. This course is designed to study the entire scope of developmental theories addressing physical, intellectual, moral, social and emotional development. Periods of development from prenatal through adolescence are presented in a chronological sequence. Research methodologies are discussed as students are expected to think critically about theory and research. Interaction of heredity, environment and maturation is explored. Students will observe children, evaluate individual differences and analyze characteristics of development using inclusive viewpoints. (Degree Credit) (CAP Aligned) (CSU) (UC Credit Limitation CDES 120 F and CDES 200 F combined; maximum credit, one course) AA GE, CSU GE (C-ID: CDEV 100)

**CDES 121 F Introduction to Early Childhood Education - The Assistant Teacher 3 Units**

**Advisory:** Current TB test results required; student showing completion of NOCROP program may apply to waive this course; enrollment in and completion of six units at Fullerton College in Child Development.

54 hours lecture per term. This course explores the role of the teacher assistant; developing conversations with children and key factors in learning are emphasized. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional) as well as a negative TB test to participate in this course. (Degree Credit) (CSU)

**CDES 122 F Principles of Early Childhood Education 3 Units**

54 hours lecture per term. This course emphasizes the development of the teacher and the construction of quality programs. Focus areas included are developmentally appropriate practice, equitable, inclusive environments, cross-cultural/non-sexist education, ethics, health, safety, curriculum, and working with parents and colleagues. The role of the adult as teacher and advocate is studied. Students gain observational skills at the Child Development and Educational Studies Department Laboratory Instructional classrooms. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 120)

**CDES 125 F Observation and Assessment for Early Learning and Development 3 Units**

54 hours lecture per term. This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored, emphasizing the use of findings to inform and plan learning environments and experiences. Students will observe young children in licensed facilities (including the CDES Lab School) as part of the assignments for the course. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 200)

**CDES 140 F Infant and Toddler Development and Observation 3 Units**

54 hours lecture per term. This course studies the child from birth to age three including prenatal development with an emphasis on physical, intellectual, social and emotional growth and development. Family interrelationships, establishment of basic trust and autonomy, and cultural variations on nurturing are included. Interwoven into this course are appropriate observation and assessment techniques. (Degree Credit) (CSU)

**CDES 141 F Principles of Infant and Toddler Care and Education 3 Units**

54 hours lecture per term. This course provides the student with an overview of the organization and operation of infant-toddler programs including: goals, philosophy, infant and family needs, activities and routines, physical space and equipment. An emphasis is on developmentally appropriate, culturally sensitive care for infants in group settings. (Degree Credit) (CSU)

**CDES 151 F School Age Child - Programs, Curriculum and Guidance 3 Units**

54 hours lecture per term. This course is for those working in school-age extended-day programs. Emphasis is on philosophy, guidance and discipline, legal issues, program/curriculum development and developmentally appropriate activities reflecting issues of diversity. Students develop criteria for evaluating quality programs. (Degree Credit) (CSU)

**CDES 199 F Child Development Independent Study 1 Unit**

54 hours independent study per term. This course is for students who wish to increase their knowledge of Child Development and Educational Studies through individual study. Students successfully completing this course will be awarded elective credit in the Child Development and Educational Studies area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required.)

**CDES 200 F Adolescent Development 3 Units**

54 hours lecture per term. This course provides an in-depth examination of the developmental period of adolescence. Emphasis is on physical, social, intellectual, moral and identity development in a framework reflecting the growing diversity of our population. While theoretical understanding is emphasized, issues such as teen pregnancy, family relationships, and education are addressed. (Degree Credit) (CSU) (UC Credit Limitation: CDES 120 F and CDES 200 F combined; maximum credit, one course)

**CDES 201 F Child in the Home and Community 3 Units**

54 hours lecture per term. This course provides an environmental study of the interaction of the family, school and community in the life of the developing child. Students explore the diversity of families and the support of these families throughout various social structures. Emphasis is on early childhood education, schools, community agencies and the responsibility of the professional as advocate. (Degree Credit) (CAP Aligned) (CSU) AA GE, CSU GE (C-ID: CDEV 110)

**CDES 204 F Introduction to Special Education 3 Units**

54 hours lecture per term. This course provides an overview of special education and the relationship to children with special needs. It includes the theoretical and educational foundations of special education, a historical background to the field of special education, legal issues, and techniques for inclusion of individuals with special needs in all settings. Various implications of full inclusion are discussed. (Degree Credit) (CSU)

**CDES 205 F Creating Environments for Young Children 3 Units**

54 hours lecture per term. This course is designed for adults interested in planning inclusive environments for children. It is valuable for teachers, directors, site supervisors, administrators, and interior designers. Students develop ways of examining environmental settings for children and evaluate the use of physical space and the selection of activity settings in terms of program goals. The study of contemporary issues in environmental planning to enrich children's experience is emphasized. Students observe children and settings and design both indoor and outdoor environments for group settings. (Degree Credit) (CSU)

**CDES 206 F Sensory Integration and Motor Planning for Young Children 3 Units**

54 hours lecture per term. This course provides early childhood educators and parents with a better understanding of the sensory and motor development of young children. Guidelines for perceptual-motor activities are explored. Techniques for early identification of learning, sensory processing, and emotional difficulties are investigated. Strategies for establishing an environment to enhance sensory and physical development are addressed. (Degree Credit) (CSU)

**CDES 207 F Principles and Techniques of Early Childhood Special Education with Field Experience 3 Units**

54 hours lecture per term. This course is designed for those who are or will be working with groups of young children. Identifying the teacher's role in early diagnosis, using IEP's (Individual Education Plans), working with specialists, and working with families are discussed. Teaching techniques, appropriate teaching goals, and curriculum adaptations are emphasized in relation to all the federally recognized categories of special education. Specific behavior management techniques and the importance of environmental adaptations for effective programs are included. Full inclusion policies and natural environments are discussed. (Degree Credit) (CSU)

**CDES 208 F Working with Families of Children with Special Needs 3 Units**

54 hours lecture per term. This course is designed for teachers, administrators, parents, and others interested in supporting families of children with special needs in early childhood settings. Developing techniques and strategies to provide this support is emphasized, as well as building a knowledge base of resources available to parents and early childhood programs. The emphasis is on the collaboration between the families and a multidisciplinary team. (Degree Credit) (CSU)

**CDES 209 F The Role of the Para-Professional in Diverse Settings 3 Units**

54 hours lecture per term. This course is an overview of the roles and responsibilities of paraprofessional including legal, instruction, evaluation and behavioral components. It is designed to train persons to work as classroom teaching assistants in public schools. This course meets the current legislative requirements for paraprofessional. (Degree Credit) (CSU)

**CDES 210 F Anti-Bias Perspective and Diversity Seminar 3 Units**

**Advisory:** ENGL 100 F or ENGL 100HF.

This seminar places an emphasis on addressing issues of bias that individuals, children and families experience on a daily basis. This course requires students to examine their own world views and look at issues from a historical and cultural context. Students are challenged to take the journey on becoming an anti-bias educator in preparation for creating a culturally-relevant teaching environment where adults and/or children actively foster cognitive, emotional and behavioral skills needed to respectfully and effectively learn about differences and similarities. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 230)

**CDES 211 F Classroom Practices for Diverse Learners 3 Units**

54 hours lecture per term. This course is designed for those who are or will be assisting in the elementary through secondary educational setting. Students will be prepared to facilitate classroom and community practices for diverse learners (individuals who have disabilities, second language learners, gifted, etc.). Topics will include literacy, language, and behavior support. Introductory knowledge in the assessment, design and implementation of life-span curriculum and methodology will be covered. (Degree Credit) (CSU)

**CDES 215 F Health, Safety, Food, and Nutrition for Children 3 Units**

54 hours lecture per term. This course focuses on health, safety and the use of food as an instructional medium in early childhood settings. Emphasis is placed on safety and sanitation issues for the prevention of injury and infectious diseases, the care of mildly-ill children, planning and organizing food-related activities, the application of basic nutrition principles to menu planning, the resolution of common food-related problems such as obesity and food allergies and techniques and resources for providing culturally-appropriate foods and nutrition education. This course meets, in-part, the California Department of Social Services health/safety requirements for family child care and center-based providers. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 220)

**CDES 225 F Early Childhood Student Teaching Practicum 3 Units**

**Prerequisite(s):** CDES 115 F and CDES 116 F and CDES 118 F and CDES 120 F, with a grade of C or better.

**Corequisite:** CDES 238 F with a grade of C or better. 18 hours lecture and 108 hours lab per term at the CDES Lab School instructional classrooms. This course includes study, exploration and practice in the many varied roles of the early childhood teacher. Topics include constructivism, emergent curriculum, developmental education, play, nature-based curriculum, environment, the Reggio-inspired principles of learning including the image of the child, observation, reflective teaching processes, child theory building, assessment of learning and documentation of children's learning is studied. Cultural and linguistic practices are included. Students will be under the direction/supervision of faculty and/or qualified Lab Tech/mentor teacher. Senate Bill 792 requires proof of current immunizations for Measles, Pertussis, and Influenza (optional), as well as a negative TB test to participate in this course. (Degree Credit) (CAP Aligned) (CSU) (C-ID: ECE 210)

**CDES 230 F Early Childhood Education Administration - Business Models and Practices 3 Units**

**Prerequisite(s):** CDES 115 F and CDES 120 F and CDES 122 F and CDES 201 F with a grade of C or better, or equivalent courses at a CAP-aligned college (Curriculum Alignment Project, State of California). 54 hours lecture per term. This course emphasizes facility and financial management, marketing, enrollment, managing health and safety, food service, and legal considerations for early childhood education programs. This course is required for the Early Childhood Education Administration Certificate and meets the State Department of Social Services licensing (Title 22) regulations for administrators. This course, together with CDES 231 F, fulfills the requirement for both Site Supervisor and Program Director permits for the State Department of Education (Title 5). (Degree Credit) (CSU)

**CDES 231 F Early Childhood Education Administration: Management Models and Personnel 3 Units**

**Prerequisite(s):** CDES 115 F and CDES 120 F and CDES 122 F and CDES 201 F, with a grade of C or better.

54 hours lecture per term. This course focuses on child development and educational theory and philosophy; effective administrative; supervisory and leadership skills; quality early childhood education programming; planning, organizing, staffing and evaluating child care centers; effective communication; and advocacy. This course is required for the Early Childhood Education Administration Certificate, meets the State Department of Social Services (Title 22) licensing regulations for administrators, and together with CDES 230 F, fulfills the requirement for both Site Supervisor and Program Director, State Department of Education (Title 5). (Degree Credit) (CSU)

**CDES 238 F Reggio and Constructivism in Early Childhood 3 Units**

54 hours lecture per term. This course is intended for early educators interested in deepening their knowledge of teaching and learning. A seminar founded in the principles of the Reggio Emilia philosophy and the Constructivist approach to early learning. Topics include reflective teaching, children's theory building, emergent curriculum, natural learning environments, observation and documentation. This course includes field trips and instruction at the CDES Laboratory School classrooms and studios during class time. Master Teacher level Child Development Permit Matrix specialization course. (Degree Credit) (CSU)

**CDES 240 F Mentoring and Leadership in Early Childhood Education 3 Units**

**Advisory:** Two years of early childhood teaching experience

54 hours lecture per term. This course is intended for early educators interested in deepening their knowledge of mentoring, supervising and leadership. Strategies for positive growth and change in the early childhood profession are explored. Course focuses on the promotion of quality professional teaching environments, including the study of the following: communication skill development, effective working relationships and innovations in the field. Course meets requirements for adult supervision at the Master Teacher level on the Child Development Permit Matrix and application to the California Mentor Teacher Project. (Degree Credit) (CAP Aligned) (CSU)

**CDES 242 F Introduction to Liberal Studies 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better.

54 hours lecture per term. This course is a survey of the historical foundations and interdisciplinary nature of liberal studies, including an introduction to the values, modes of inquiry, and means of expression in the natural sciences, social sciences, and arts and humanities. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**CDES 261 F Introduction to Elementary Classroom Teaching 3 Units**

54 hours lecture per term. This course provides students interested in elementary teaching an introduction to teaching and learning; an overview of the scope and sequence of curriculum planning; understanding of content standards, California Standards of the Teaching profession; experience in the development, presentation, and evaluation of learning activities. This course is part of an articulation agreement with CSUF for preparation for the teaching credential program. To qualify for this articulation, students must earn a grade of B or better for this course. (Degree Credit) (CSU)

**CDES 299 F Child Development Independent Study 1 Unit**

54 hours independent study per term. This course is for students who wish to increase their knowledge of Child Development and Educational Studies through individual study. Students successfully completing the course will be awarded elective credit in the Child Development and Educational Studies area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content); UC review required)

## Child and Adolescent Development Associate in Arts Degree for Transfer Requirements

**PROGRAM CODE:** 2A36796

The **Associate in Arts Degree for Transfer in Child and Adolescent Development**, also called the AA-T (or ADT), prepares students to transfer to CSU campuses that offer bachelor's degrees in Child and Adolescent Development. Ed Code Section 66746-66749 states students earning the Child and Adolescent Development AA-T degree will be granted priority for admission as a Child Development major to a CSU, as determined by the CSU campus to which the student applies. The program is designed to prepare students for working with young children from birth through adolescence, and for employment in child development programs, public and private pre-schools, and children's centers. The Associate in Arts Degree for Transfer in Child and Adolescent Development requires a total of 19 units.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses: Select 3 courses (10 units):</b>		<b>10</b>
CDES 120 F	Child Development	3
MATH 120 F	Introductory Probability and Statistics	4
	or MATH 120HF Honors Introductory Probability and Statistics	
	or PSY 161 F Elementary Statistics for Behavioral Science	
	or PSY 161HF Honors Elementary Statistics for Behavioral Science	
	or SOSC 120 F Introduction to Probability and Statistics	
PSY 101 F	General Psychology	3
	or PSY 101HF Honors General Psychology	
<b>Restricted Electives: Select 3 courses (9 units):</b>		<b>9</b>



ANTH 102 F or ANTH 102HF	Cultural Anthropology Honors Cultural Anthropology	3
BIOL 102 F	Human Biology	3
CDES 115 F	Introduction to Early Childhood Education Curriculum	3
CDES 201 F	Child in the Home and Community	3
PSY 139 F	Developmental Psychology - Life Cycle	3
SOC 101 F or SOC 101HF	Introduction to Sociology Honors Introduction to Sociology	3
SOC 275 F or SOC 275HF	Marriage and Family Honors Marriage and Family	3
SOC 290 F	Sociology of Race and Ethnicity	3

**Total Units** 19

## Program Student Learning Outcomes

**Outcome 1:** Differentiate development in various domains of child development: physical, psychosocial, and cognitive, including typical and atypical development, and integrate knowledge of the domains into comprehensive understanding of child development.

**Outcome 2:** Differentiate the major perspectives of psychology, including the areas of biological, behavioral, cognitive, psychodynamic and humanistic psychology.

**Outcome 3:** Demonstrate reasonable knowledge regarding descriptive statistics and will be able to calculate the mean, mode, median, range and standard deviation.

## Child Development and Educational Studies Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A18801

The **Child Development and Educational Studies Associate in Arts Degree** (CDES AA) prepares students for employment as teachers or teacher's assistants in private preschools or children's centers. This degree also prepares students majoring in CDES for transfer to a four-year institution. The CDES AA degree, in conjunction with CDES 225 F: Early Childhood Student Teaching Practicum, and the required minimum number of hours of field experience will meet the Title V Child Development Teacher Permit requirement. In many of the courses included in the CDES AA degree, student's study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. A minimum grade of C is required in each course taken. The Child Development and Educational Studies Associate in Arts Degree includes 21 units.

Code	Title	Units
<b>Required Courses (21 units):</b>		
CDES 120 F	Child Development	3
CDES 122 F	Principles of Early Childhood Education	3
CDES 125 F	Observation and Assessment for Early Learning and Development	3
CDES 201 F	Child in the Home and Community	3
CDES 204 F	Introduction to Special Education	3
CDES 210 F	Anti-Bias Perspective and Diversity Seminar	3

CDES 238 F	Reggio and Constructivism in Early Childhood	3
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**Total Units** 21

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Assess and challenge issues of bias that children, individuals and families experience.

**Outcome 3:** Analyze and think critically about the teacher's comprehensive role in early learning and development settings.

**Outcome 4:** Recognize and evaluate the interrelationships of the child, family, school and greater community.

**Outcome 5:** Analyze and apply human development theory to observation and practice.

**Outcome 6:** Design quality early childhood programs and curriculum.

## Early Childhood Education Administration Certificate

### Requirements

**PROGRAM CODE:** 2C08432A

The **Early Childhood Education Administration Certificate** prepares the student to act in a leadership and administrative capacity in a child care and development program. This includes providing for budget design and fiscal management, marketing, constructing personal policies and procedures, including job analysis, developing a staff in-service plan, and designing a comprehensive educational philosophy. To qualify for the Early Childhood Education Administration Certificate, the student must have already met the minimum requirements for the Teacher Permit on the Child Development Permit matrix and must complete the total of 27 units of required courses. Many of the courses in this program utilize the CDES Child Development Laboratory Instructional Classrooms for observation and study of young children and their programs. A grade of C or better is required in each course taken. See Child Development Permit Matrix for requirements needed for Title V programs. The Child Development Permit Matrix is available in the Social Sciences Division Office.

**NOTE:** With this Certificate plus 350 days of 3+ hours per day (within the previous 4 years) including at least 100 days of supervising adults, the student will be qualified to apply for the Title V Child Development Permit at the Site Supervisor level.

Code	Title	Units
<b>Required Courses (27 units):</b>		
CDES 204 F	Introduction to Special Education	3
CDES 205 F	Creating Environments for Young Children	3
CDES 208 F	Working with Families of Children with Special Needs	3
CDES 210 F	Anti-Bias Perspective and Diversity Seminar	3
CDES 215 F	Health, Safety, Food, and Nutrition for Children	3

CDES 230 F	Early Childhood Education Administration - Business Models and Practices	3
CDES 231 F	Early Childhood Education Administration: Management Models and Personnel	3
CDES 238 F	Reggio and Constructivism in Early Childhood	3
CDES 240 F	Mentoring and Leadership in Early Childhood Education	3
<b>Total Units</b>		<b>27</b>

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Recognize and challenge issues of bias that children, individuals and families experience.

**Outcome 3:** Analyze and think critically about the teacher's comprehensive role in early learning and development settings.

**Outcome 4:** Recognize and evaluate the intershy;relationships of the child, family, school and greater community.

**Outcome 5:** Apply human development theory to observation and practice.

**Outcome 6:** Design quality early childhood programs and curriculum.

## Early Childhood Education Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A16838

The **Early Childhood Education Associate in Arts Degree** (ECE AA), provides students with preparation for employment working with children from birth through age 8 in early care and education programs, public and private preschools, and children's centers. The ECE AA courses meet the basic course requirements for teachers in private preschools licensed by the California State Department of Social Services. With the completion of the ECE AA degree and the required minimum number of field experience hours, the student will be able to apply for the Title V Child Development Permit at the Associate Teacher level. In many of the courses included in the ECE AA degree, student's study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. A grade of C or better is required in each course taken. The Early Childhood Education Associate in Arts Degree requires a total of 23 units.

Code	Title	Units
<b>Required Courses (21 units):</b>		
CDES 115 F	Introduction to Early Childhood Education Curriculum	3
CDES 120 F	Child Development	3
CDES 122 F	Principles of Early Childhood Education	3
CDES 125 F	Observation and Assessment for Early Learning and Development	3
CDES 201 F	Child in the Home and Community	3
CDES 210 F	Anti-Bias Perspective and Diversity Seminar	3

CDES 121 F	Introduction to Early Childhood Education - The Assistant Teacher	3
or CDES 225 F	Early Childhood Student Teaching Practicum	
<b>Restricted Electives (2 units):</b>		<b>2</b>
CDES 116 F	Art Education in Early Childhood (formerly CDES 123AF)	2
CDES 117 F	Literacy and Language in Early Childhood (formerly CDES 123BF)	2
CDES 118 F	Science and Math Education in Early Childhood (formerly CDES 123CF)	2
CDES 119 F	Music Education in Early Childhood (formerly CDES 123DF)	2
<b>Total Units</b>		<b>23</b>

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Recognize and challenge issues of bias that children, individuals and families experience, therefore generating a comprehensive portfolio of the student's journey becoming an anti-bias educator that includes academic journals and evidence of further research from multiple perspectives.

**Outcome 3:** Analyze and think critically about the teacher's comprehensive role in early learning and development settings.

**Outcome 4:** Design quality early childhood programs and curriculum.

## Early Childhood Education Associate in Science Degree for Transfer

### Requirements

PROGRAM CODE: 2S36563

The **Associate in Science for Transfer in Early Childhood Education**, also called the ECE AS-T, prepares students to transfer to CSU campuses that offer bachelor's degrees in Early Childhood Education. Ed Code Section 66746-66749 states students earning the Early Childcare Education AS-T degree will be granted priority for admission as an Early Childcare Education major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 24 units in the major, with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better. There are no additional graduation requirements. The ECE AS-T Degree requires a total of 24 units of required courses as listed below. The program is designed to prepare students for working with young children from birth through the age of 8 and for employment in child development programs, public and private preschools, and children's centers.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education –

Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).

- b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (24 units):</b>		
CDES 115 F	Introduction to Early Childhood Education Curriculum	3
CDES 120 F	Child Development	3
CDES 122 F	Principles of Early Childhood Education	3
CDES 125 F	Observation and Assessment for Early Learning and Development	3
CDES 201 F	Child in the Home and Community	3
CDES 210 F	Anti-Bias Perspective and Diversity Seminar	3
CDES 215 F	Health, Safety, Food, and Nutrition for Children	3
CDES 225 F	Early Childhood Student Teaching Practicum	3
<b>Total Units</b>		<b>24</b>

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Recognize and challenge issues of bias that children, individuals and families experience.

**Outcome 3:** Analyze and think critically about the teacher's comprehensive role in early learning and development settings.

**Outcome 4:** Recognize and evaluate the interrelationships of the child, family, school and greater community.

**Outcome 5:** Apply human development theory to observation and practice.

**Outcome 6:** Design and implement quality early childhood programs and curriculum.

## Early Childhood Education Teacher Certificate

### Requirements

PROGRAM CODE: 2C08431

The **Early Childhood Education Teacher Certificate Program** prepares the student to provide service in the care, development and instruction of children in a licensed early care and education program. The certificate requires the completion of 30-31 units of which 27 are in required courses. An additional 3-4 units minimum must be selected from restricted electives. A grade of C or better is required in each course taken. In many

of the courses taken in this program, students will study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. This certificate plus 16 units of general education and 175 days of 3+ hours per day experience will meet the Title V Child Development Permit, Teacher level requirements.

Code	Title	Units
<b>Required Courses (27 units):</b>		
CDES 115 F	Introduction to Early Childhood Education Curriculum	3
CDES 120 F	Child Development	3
CDES 122 F	Principles of Early Childhood Education	3
CDES 125 F	Observation and Assessment for Early Learning and Development	3
CDES 201 F	Child in the Home and Community	3
CDES 204 F	Introduction to Special Education	3
CDES 210 F	Anti-Bias Perspective and Diversity Seminar	3
CDES 225 F	Early Childhood Student Teaching Practicum	3
CDES 238 F	Reggio and Constructivism in Early Childhood	3
<i>A valid American Red Cross First Aid Card or equivalent must be on file.</i>		
<b>Restricted Electives (3-4 units):</b>		<b>3-4</b>
CDES 116 F	Art Education in Early Childhood (formerly CDES 123AF)	2
CDES 117 F	Literacy and Language in Early Childhood (formerly CDES 123BF)	2
CDES 118 F	Science and Math Education in Early Childhood (formerly CDES 123CF)	2
CDES 119 F	Music Education in Early Childhood (formerly CDES 123DF)	2
CDES 121 F	Introduction to Early Childhood Education - The Assistant Teacher	3
CDES 141 F	Principles of Infant and Toddler Care and Education	3
CDES 200 F	Adolescent Development	3
CDES 206 F	Sensory Integration and Motor Planning for Young Children	3
CDES 207 F	Principles and Techniques of Early Childhood Special Education with Field Experience	3
CDES 208 F	Working with Families of Children with Special Needs	3
CDES 215 F	Health, Safety, Food, and Nutrition for Children	3
<b>Total Units</b>		<b>30-31</b>

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Recognize and challenge issues of bias that children, individuals and families experience.

**Outcome 3:** Analyze and think critically about the teacher’s comprehensive role in early learning and development settings.

**Outcome 4:** Recognize and evaluate the interrelationships of the child, family, school and greater community.

**Outcome 5:** Design quality early childhood programs and curriculum.

# Elementary Teacher Education Associate in Arts Degree for Transfer

## Requirements

**PROGRAM CODE:** 2A31525

The **Associate in Arts in Elementary Teacher Education for Transfer** (AA-T), also called the Elementary Teacher Education AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor’s degrees in Liberal Studies or Integrated Teacher Education Programs. Ed Code Section 66746-66749 states students earning the Elementary Teacher Education AA-T degree will be granted priority for admission as a Liberal Studies or Integrated Teacher Education Program major to a local CSU, as determined by the CSU campus to which the student applies. The Elementary Teacher Education AA-T Degree is designed for students who will be transferring to a four-year institution, obtaining a Bachelor’s degree and pursuing a teaching credential through a California State University (CSU) integrated or traditional teacher preparation program. Course and degree requirements may vary at each CSU campus therefore it is important that students consult with a Fullerton College Teacher Preparation Counselor and respective university transfer representative to confirm program requirements and transferable work. The Elementary Teacher Education AA-T Degree requires a total of 54-57 units.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (48-50 units):</b>		
CDES 261 F	Introduction to Elementary Classroom Teaching	3
CDES 120 F	Child Development	3
BIOL 100 F	Principles of Biology	4
or BIOL 101 F	General Biology	
or BIOL 101HF	Honors General Biology	

CHEM 100 F	Chemistry for Daily Life	4-5
or CHEM 101 F	Chemistry for Allied Health Science	
PHYS 130 F	Elementary Physics	4
ESC 101 F	Earth Science Survey	4
& ESC 101LF	and Earth Science Survey Lab	
or ESC 107 F	Earth Science for Educators	
MATH 203 F	Mathematics for Future Elementary Teachers	3
COMM 100 F	Public Speaking	4
ENGL 100 F	College Writing	4-5
or ENGL 100HF	Honors College Writing	
or ENGL 101 F	Enhanced College Writing	
ENGL 102 F	Introduction to Literature	3
or ENGL 102HF	Honors Introduction to Literature	
GEOG 100 F	Global Geography	3
or GEOG 100HF	Honors Global Geography	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 170 F	History of the United States to 1877 (formerly History of the United States I)	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
POSC 100 F	American Government	3
or POSC 100HF	Honors American Government	
<b>List A - Select one course from the following list (3-4 units):</b>		<b>3-4</b>
ENGL 103 F	Critical Reasoning and Writing	4
or ENGL 103HF	Honors Critical Reasoning and Writing	
ENGL 104 F	Critical Thinking and Writing About Literature	4
ENGL 201 F	Intermediate College Writing	3
PHIL 172 F	Critical Thinking and Writing	3
<b>List B - Select one course from the following list (3 units):</b>		<b>3</b>
ART 110 F	Introduction to Art	3
DANC 100 F	Dance Appreciation	3
MUS 116 F	Music Appreciation	3
THEA 100 F	Introduction to the Theatre	3

**Total Units** **54-57**

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Analyze and think critically about the teacher’s comprehensive role in early learning and development settings.

**Outcome 3:** Apply human development theory to observation and practice.

# Infant and Toddler Teacher Certificate

## Requirements

PROGRAM CODE: 2C15781B

The **Infant and Toddler Teacher Certificate** is designed to educate caregivers for employment in programs serving infants and toddlers. It is also recommended for Licensed Family Child Care Providers who care for very young children in their homes. Completion of this certificate will meet the State of California Title 22 requirements to teach infants and toddlers in a licensed facility. In many of the courses taken in this program, students will study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. Completion of this certificate will meet the requirements for six specialization units for the Title V Child Development Permit at the Master Teacher level. Completion of the AA or AS-T degree (transfer) in Child Development is strongly recommended for those students considering a professional career in the area of Infant Development. A minimum grade of C is required in each course taken. This certificate requires a total of 21 units.

Code	Title	Units
<b>Required Courses (21 units):</b>		
CDES 120 F	Child Development	3
CDES 140 F	Infant and Toddler Development and Observation	3
CDES 141 F	Principles of Infant and Toddler Care and Education	3
CDES 201 F	Child in the Home and Community	3
CDES 208 F	Working with Families of Children with Special Needs	3
CDES 210 F	Anti-Bias Perspective and Diversity Seminar	3
CDES 215 F	Health, Safety, Food, and Nutrition for Children	3
<b>Total Units</b>		<b>21</b>

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Assess and challenge issues of bias that children, individuals and families experience.

**Outcome 3:** Analyze and think critically about the teacher's comprehensive role in infant and toddler learning and development settings.

**Outcome 4:** Apply human development theory to observation and practice.

# Special Education Certificate

## Requirements

PROGRAM CODE: 2C16840B

The **Special Education Certificate** prepares students for employment as instructional aides in K-12 public schools and early childhood programs where children identified with special needs are enrolled. In many of the courses required for this certificate, student's study, observe and learn utilizing the Child Development Laboratory instructional classrooms. A

grade of C or better is required in each course taken. This certificate requires a total of 18 units.

Code	Title	Units
<b>Required Courses (6 units):</b>		
CDES 120 F	Child Development	3
CDES 204 F	Introduction to Special Education	3
<b>Restricted Electives (12 units):</b>		
CDES 206 F	Sensory Integration and Motor Planning for Young Children	3
CDES 207 F	Principles and Techniques of Early Childhood Special Education with Field Experience	3
CDES 208 F	Working with Families of Children with Special Needs	3
CDES 209 F	The Role of the Para-Professional in Diverse Settings	3
CDES 211 F	Classroom Practices for Diverse Learners	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Know and understand the established as well as recent theories of child development.

**Outcome 2:** Analyze and think critically about the teacher's comprehensive role in early learning and development settings.

**Outcome 3:** Recognize and evaluate the interrelationships of the child, family, school and greater community.

**Outcome 4:** Design quality early childhood programs and curriculum.

# Cinema - Radio - TV

Division: Technology and Engineering

## Faculty

CINEMA and TV

Laura Bouza

RADIO

(Vacant)

## Degrees and Certificates

- Communications: General Associate in Arts Degree (p. 280)
- Film, Television, and Electronic Media Associate in Science Degree for Transfer (p. 281)
- Radio and Television/Video Production Certificate (p. 281)
- Radio Broadcast News Associate in Arts Degree (p. 282)
- Radio Broadcast News Certificate (p. 282)
- Radio Broadcasting Associate in Arts Degree (p. 282)
- Radio Broadcasting Certificate (p. 283)
- Radio Production Associate in Arts Degree (p. 283)
- Sports Broadcasting Certificate (p. 283)
- Television and Film Associate in Arts Degree (p. 284)
- Television and Film Production Certificate (p. 284)

## Courses

- CRTV 118 F Introduction to Radio, TV and Film** **3 Units**  
54 hours lecture per term. This course is designed to assist the beginning student in understanding radio, television, cable, film, and electronic mass media. For those who plan to pursue a career in broadcasting or film, this course will provide guidance for career decisions and background for more specialized courses. For those with a general interest in broadcasting and film, this course will provide a broad understanding of the electronic mass media industries. (Degree Credit) (CSU) AA GE (C-ID: FTVE 100)
- CRTV 120 F Media Aesthetics** **3 Units**  
54 hours lecture per term. This course provides a background in understanding aesthetics used in television, motion pictures, video games, digital media and explores the development and impact of mediated messages. The interplay and structuring of elements of sight, sound, and motion as message components, and their capacity to generate impressions, stimulate feelings, shape attitudes, and convey information are examined. (Degree Credit) (CSU) AA GE, CSU GE (C-ID: FTVE 105)
- CRTV 121 F American Cinema to the 1960s** **3 Units**  
54 hours lecture per term. This course examines the American motion picture industry as a unique economic, industrial, aesthetic, and cultural institution. Development and changes to the 1960's are examined related to technology; industrial and economic models; aesthetic styles and genres; production, marketing, and distribution processes; and audiences. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- CRTV 122 F Audio Production Techniques** **3 Units**  
36 hours lecture and 72 hours lab per term. This course provides instruction in the operation of radio and television audio equipment, broadcast microphones, and computer software associated with media recording and internet radio. Projects will include production of radio commercials, television commercial soundtracks, digital audio editing, and special radio and television broadcast procedures with an emphasis on smooth operation of the audio control board and other audio equipment. (Degree Credit) (CSU) (C-ID: FTVE 120)
- CRTV 124 F Broadcast Advertising Sales** **1 Unit**  
18 hours lecture per term. This course covers the analysis of the sales function in commercial radio and television stations, and cable television franchises. The students examine the methodology and practical application of electronic media advertising, sales, and research. Audience demographics, market surveys, rate structure, and client relationships are included. Students will learn to write standard length commercials that focus on the targeted consumer and produce results for the advertiser. Discussion of media competitive advantages and disadvantages, as well as vocabulary and techniques of broadcast sales are also examined. (CSU) (Degree Credit)
- CRTV 126AF World Cinema to 1945** **3 Units**  
54 hours lecture per term. This is the first course in a two-course sequence that will provide a background in cinema history with a global perspective, following the growth of cinema from primarily a U.S. and European form of entertainment and communication to an international medium with significant production centers, cultural traditions, and production styles found in a variety of locations around the world. This course will focus on world cinema from its early development through the end of World War II. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- CRTV 126BF World Cinema 1946 to Present** **3 Units**  
54 hours lecture per term. This is the second course in a two-course sequence that will provide a background in cinema history with a global perspective, following the growth of cinema from primarily a U.S. and European form of entertainment and communication to an international medium with significant production centers, cultural traditions, and production styles found in a variety of locations around the world. This course will focus on world cinema after World War II to the present. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- CRTV 127 F Screenwriting** **3 Units**  
54 hours lecture per term. This course covers the concepts and practices in the various types of dramatic writing for television and motion picture production. Students will learn about characterization, conflict, structure, and commercial prospects. (CSU) (Degree Credit)
- CRTV 128 F Writing for Radio, TV and Film** **3 Units**  
54 hours lecture per term. This course covers the concepts, practices and forms for commercials, interviews, corporate and dramatic presentations for radio, television, film and the Internet. This is a course in all forms of media writing. (Degree Credit) (CSU) (C-ID: FTVE 110)
- CRTV 129 F Broadcast News** **3 Units**  
36 hours lecture and 72 hours lab per term. This course provides instruction and practice in gathering and writing news for radio and television. The emphasis is on writing copy and familiarization with professional practices in radio and television news operations, including the use of local news sources, international wire services and other news material. Course activities include planning, writing, and delivering news for radio and television. (CSU) (Degree Credit)
- CRTV 130 F Broadcast Audio Production** **3 Units**  
**Prerequisite(s):** CRTV 122 F completed with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is designed to increase digital audio production skills for radio and television. Projects are designed to give students the opportunity to use the audio production room for a variety of production purposes for radio, television, film, internet and media production. (CSU) (Degree Credit)
- CRTV 131 F Contemporary American Cinema (formerly Contemporary Cinema)** **3 Units**  
54 hours lecture per term. This course focuses on the American motion picture industry beginning with the film school generation and the production processes, economic factors, and social influences that have shaped the industry and been shaped by the industry. This will include changes in practices relating to production aesthetics and techniques, marketing, distribution, and technology. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- CRTV 133 F Traffic Reporting** **3 Units**  
36 hours lecture and 54 hours lab per term. This course provides instruction and practice in gathering and reporting traffic for radio and television. The emphasis is on gathering information and writing and announcing traffic updates and familiarization with professional practices in radio and television traffic operations, including the use of local maps, CHP sources, Cal Trans cameras, and other online material. Course activities include compiling, composing, and delivering traffic reports for radio and television. (CSU) (Degree Credit)

- CRTV 135 F Broadcast TV and Radio Announcing** **3 Units**  
36 hours lecture and 54 hours lab per term. This is a course in announcing technique focusing on the announcing and voiceover skills most needed in contemporary radio and television. This course concentrates on announcer voice technique on and off camera, talk radio hosting skills, commercial interpretation, news announcing, podcasting and ad-libbing. (CSU) (Degree Credit)
- CRTV 139 F Intermediate Broadcast News** **3 Units**  
*Prerequisite(s):* CRTV 129 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is designed to increase the skill level of broadcast news students who have taken one semester of CRTV 129 F, with added television reports, interviews, produced features, traffic reports and additional newscasts. (CSU) (Degree Credit)
- CRTV 145 F Radio and TV Sports Broadcasting** **3 Units**  
36 hours lecture and 72 hours lab per term. In this course, class members will be involved in the broadcast of local sports on radio station KBPK, 90.1 FM and the Fullerton College Cable Television Network. The sports to be broadcast include football, basketball, baseball and soccer. Students will also perform as sportscasters on news programs for KBPK. Students will interview local athletes, write, and produce feature material for broadcast. (CSU) (Degree Credit)
- CRTV 146 F Intermediate Sports Broadcasting** **3 Units**  
*Prerequisite(s):* CRTV 145 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. In this course, students will take the lead on writing and preparing broadcasts and building presentation/performance skills in the broadcast of local sports on radio station KBPK, 90.1 FM, the Fullerton College Cable Television Network, and Sportsnet web site. The sports to be broadcast include football, baseball, basketball, soccer, NASCAR and hockey. Students will also perform as sportscasters on news programs on KBPK. Students will interview local athletes, write and produce feature material for broadcast. The contributions of minorities and women in sports will be highlighted. (CSU) (Degree Credit)
- CRTV 147 F Advanced Sports Broadcasting** **3 Units**  
*Prerequisite(s):* CRTV 146 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. In this course, students will develop copy, produce, edit and analyze the effectiveness of broadcasts of local sports on radio station KBPK, 90.1 FM, the Fullerton College Cable Television Network, and the Internet. The sports to be broadcast include football, baseball, basketball, soccer, softball, hockey golf, tennis and volleyball. Students will also perform as sportscasters on Fullerton College Cable TV. Students will interview local athletes, and will also write and produce feature material for broadcast. (CSU) (Degree Credit)
- CRTV 149 F Advanced Broadcast News** **3 Units**  
*Prerequisite(s):* CRTV 129 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is designed to increase the skill level of broadcast news students. This course has added field television reports, community interviews, police and fire department telephone interviews, produced features, traffic reports written from source material, and additional newscasts. (CSU) (Degree Credit)
- CRTV 150 F Television Studio Production** **3 Units**  
36 hours lecture and 54 hours lab per term. This course is an introduction to multiple-camera studio production, theory and practice of producing programs live. Student crew positions, including writer, producer, director, assistant director, lighting director, floor manager, camera operator, technical director, audio engineer, recording engineer and graphics designer. (Degree Credit) (CSU) (C-ID: FTVE 135)
- CRTV 157 F Digital Production and Non-Linear Editing for Video and Film** **3 Units**  
36 hours lecture and 72 hours lab per term. This course introduces single-camera video and filmmaking production techniques; including operation of digital video cameras and recorders and sound, lighting, and non-linear editing equipment. Students will use professional procedures from pre-production through post-production to develop, produce, and execute to completion various non-fiction and fiction program formats applicable to television and motion pictures. (Degree Credit) (CSU) (C-ID: FTVE 130)
- CRTV 160 F Introduction to 16mm Film Production and Digital Cinematography (formerly Introduction to Filmmaking)** **3 Units**  
*Prerequisite(s):* CRTV 157 F or DART 180 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course is an introduction to the fundamental techniques and aesthetics of film production including digital cinematography. Lecture/lab will emphasize camera operation, editing, lighting, cinematography and directing. Study and analysis of classic films as well as student's own work will be viewed. (Degree Credit) (CSU) (C-ID: FTVE 150)
- CRTV 164 F Advanced Digital Production and Non-Linear Editing for Video** **3 Units**  
*Prerequisite(s):* CRTV 157 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is designed to provide students with training and experience related to the design and execution of professional quality single-camera productions that would comprise a demo tape appropriate to pursue employment in the television/film industry. The focus will be on achieving levels of design and execution that are effective in meeting project/client and industry needs. Elements include multi-camera editing, green screen, key framing and color correction. (CSU) (Degree Credit)
- CRTV 175 F Documentary Filmmaking** **3 Units**  
*Advisory:* CRTV 157 F or knowledge of camcorder usage and Apple computers.  
54 hours lecture per term. This course gives an introduction to modern digital documentary filmmaking techniques. Practical narrative and technical approaches to documentary productions are examined and demonstrated. Students will participate in production of a documentary project(s). (Degree Credit) (CSU)
- CRTV 196 F Communications Seminars** **0.5-3 Units**  
0-54 hours lecture and 0-162 hours lab per term. This course is designed to expose students to up-to-date equipment, methods, techniques, and materials. These courses offer the student opportunities for specialized training in greater depth than can be offered in a general course. These courses will vary from semester to semester depending on student interest, industry developments, and need for specialized training. See class schedule for current offerings. (CSU) (Degree Credit)
- CRTV 199 F Cinema-Radio-TV Independent Study** **1-3 Units**  
54-162 independent study hours per term. This course is designed for students who wish to increase their knowledge of cinema, radio or television through individual study. Project with written report or outside reading with written report is required. Independent production with staff supervision may be approved. (CSU) (UC review required) (Degree Credit)
- CRTV 227 F Intermediate Screenwriting** **3 Units**  
*Prerequisite(s):* CRTV 127 F with a grade of C or better  
54 hours lecture per term. The application of concepts and practices used in the various types of dramatic writing for television and motion picture production in the completion of a feature length screenplay that meets industry standards. Students work from original student concept and first 20 pages developed in CRTV 127 F to finish a fully developed screenplay that is ready for professional submittal. (CSU) (Degree Credit)

**CRTV 235 F On-Air Radio Broadcasting 3 Units**

**Prerequisite(s):** CRTV 122 F and CRTV 135 F with a grade of C or better  
18 hours lecture and 108 hours lab per term. This course includes daily broadcast preparation and presentation of on-the-air programs. Students gain actual on-the-air experience on College FM station, KBPK, 90.1 MHz. (CSU) (Degree Credit)

**CRTV 236 F On-Air Radio Broadcasting - Intermediate 3 Units**

**Prerequisite(s):** CRTV 235 F with a grade of C or better  
18 hours lecture and 108 hours lab per term. This course builds intermediate on-air skills, and includes the developing and writing of material for broadcast and the production, editing and presentation of materials on the air and on the internet. Students will program original long form music segments. Students gain increased proficiency in on-air broadcasting on College FM radio station KBPK, 90.1 MHz, and are heard worldwide on KBPK's Internet stream. Students will also analyze the effectiveness of on-air broadcasts. (CSU) (Degree Credit)

**CRTV 237 F Advanced On-Air Radio Broadcasting 3 Units**

**Prerequisite(s):** CRTV 236 F with a grade of C or better  
18 hours lecture and 108 hours lab per term. This course includes long-form music interview with instrumental and vocal recording artists in various genres, including jazz, country, rock and roll, electronic music, hip-hop and classical. Students gain actual on-air experience on college station (KBPK) and internet radio. (CSU) (Degree Credit)

**CRTV 245AF Digital Editing, Graphics and Effects 3 Units**

**Prerequisite(s):** CRTV 157 F with a grade of C or better  
This course builds on the knowledge and skills received in CRTV 157 F. Students learn the aesthetics and techniques of incorporating graphics and special effects while practicing advanced non-linear video editing skills. (CSU) (Degree Credit)

**CRTV 245BF Advanced Digital Editing, Graphics and Effects 3 Units**

**Prerequisite(s):** CRTV 245AF with a grade of C or better.  
36 hours lecture and 72 hours lab per term. This course is designed to provide students with more advanced training in non-linear editing, incorporating graphics, audio mixing and utilizing special effects in editing. Special emphasis will be placed on in-depth knowledge of equipment, speed, accuracy, aesthetics and special effects. (CSU) (Degree Credit)

**CRTV 280 F Television Production Workshop 2-5 Units**

**Prerequisite(s):** CRTV 150 F with a grade of C or better.  
18 hours lecture, 18 hours lab and 36-90 hours arranged lab per term. In this course, students participate as crew members on Media Services and Communication Department cable and campus productions utilizing four camera remote van, lab and EFP Equipment. Instruction in equipment operation, production management and production design. The course prepares students for employment in the industry through development of advanced hands-on skills and in-depth, varied production experience. (CSU) (Degree Credit)

**CRTV 290 F Internship in Communications I 2-4 Units**

18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through internships/employment in radio and television stations and television and film industry-related companies. (CSU) (Degree Credit)

**CRTV 291 F Internship in Communications II 2-4 Units**

**Prerequisite(s):** CRTV 290 F with a grade of C or better  
18 hours lecture and 60-180 hours of supervised unpaid internship or 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (Degree Credit) (CSU)

**CRTV 292 F Internship in Communications III 2-4 Units**

**Prerequisite(s):** CRTV 291 F with a grade of C or better  
18 hours lecture and 90-270 hours of employment or unpaid internship per term. This course is designed to give the student the skills needed to market themselves as professionals in the entertainment and communication industries. (CSU) (Degree Credit)

**CRTV 293 F Internship in Communications IV 2-4 Units**

**Prerequisite(s):** CRTV 292 F with a grade of C or better  
18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course is designed to help the students who are interning to transition into working as independent contractors in the communication and entertainment related industries. (CSU)

**CRTV 299 F Cinema-Radio-Television Independent Study 1-3 Units**

54-162 hours of independent research or lab per term. This course is designed for students who wish to explore another topic or delve deeper into a topic that they explored in CRTV 199 F. Study must include project or written report in the area of cinema, radio or television. (CSU) (Degree Credit)

## Communications: General Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A03828

The **Communications: General Associate in Arts Degree**, This degree provides a solid foundation for students interested in all areas of Communications. This degree is especially beneficial to students interested in Broadcast Journalism and requires 18 units.

Code	Title	Units
<b>Required Courses - Select from the following (18 units):</b>		<b>18</b>
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 122 F	Audio Production Techniques	3
CRTV 129 F	Broadcast News	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 145 F	Radio and TV Sports Broadcasting	3
CRTV 150 F	Television Studio Production	3
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
JOUR 101 F	Reporting and Writing	3
JOUR 102 F	Advanced Reporting and Writing	3
JOUR 110 F	Mass Media Survey	3
PHOT 101 F	Introduction to Photography	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Operate audio recording equipment used in radio, internet radio and television.



**Outcome 2:** Demonstrate the ability to effectively direct and/or produce a video production while working in a group.

**Outcome 3:** Compose written copy for radio, TV, film or the internet.

## Film, Television, and Electronic Media Associate in Science Degree for Transfer

### Requirements

PROGRAM CODE: 2S36696

The **Film, Television, and Electronic Media Associate in Arts Degree for Transfer** prepares students for seamless transfer to CSU campuses that offer bachelor's degrees in Radio-Television-Film, Television-Film, Film, Television, Video, and Electronic Media. Ed Code Section 66746-66749 states that students earning the Associates in Science in Film, Television, and Electronic Media for Transfer Degree will be granted priority for admission as Radio-Television-Film, Television-Film or Electronic Media majors to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units, including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. There are no additional graduation requirements. This degree is designed to develop a well-rounded beginning level coursework in television/film production, audio production, film/media history and the business of electronic media. While a baccalaureate degree is recommended preparation for those considering careers as producers, directors and in areas of management, completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. The Film, Television and Electronic Media AS-T Degree requires a total of 18 units of required courses and restricted electives from the categories below as indicated.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (6 units):</b>		<b>6</b>
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 120 F	Media Aesthetics	3
CRTV 128 F	Writing for Radio, TV and Film	3
<b>List A - Area 1 (3 units) - Select one Audio Course:</b>		<b>3</b>
CRTV 122 F	Audio Production Techniques	3
<b>List A - Area 2 (3 units) - Select one Video or Film Course:</b>		<b>3</b>
CRTV 150 F	Television Studio Production	3
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
CRTV 160 F	Introduction to 16mm Film Production and Digital Cinematography (formerly Introduction to Filmmaking)	3
<b>List B (3 units) - Select one course from the list below or a course not used in one of the categories above:</b>		<b>3</b>
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 175 F	Documentary Filmmaking	3

<b>List C (3 units) - Select one course from the list below or a course not used in one of the categories above:</b>		<b>3</b>
CRTV 121 F	American Cinema to the 1960s	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema 1946 to Present	3
CRTV 127 F	Screenwriting	3
CRTV 131 F	Contemporary American Cinema (formerly Contemporary Cinema)	3
CRTV 164 F	Advanced Digital Production and Non-Linear Editing for Video	3
CRTV 290 F	Internship in Communications I	3

**PLEASE NOTE: CRTV 290 F is a variable-unit course (2-4 units), but must be taken for 3 units to meet the List C requirement.**

**Total Units** **18**

### Program Student Learning Outcomes

**Outcome 1:** Operate audio recording equipment used in radio, internet radio and television.

**Outcome 2:** Demonstrate the ability to effectively direct and/or produce a video production while working in a group.

**Outcome 3:** Compose written copy for radio, TV, film or the internet.

## Radio and Television/Video Production Certificate

### Requirements

PROGRAM CODE: 2C11690

The **Radio and Television/Video Production Certificate** prepares students for entry-level employment in the radio/ television/video broadcast journalism industries. This certificate requires a total of 37-40 units of which 32-34 are in required courses. An additional 5-6 units must be chosen from the restricted units listed below. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (32-34 units):</b>		
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 122 F	Audio Production Techniques	3
CRTV 128 F	Writing for Radio, TV and Film	3
CRTV 129 F	Broadcast News	3
CRTV 130 F	Broadcast Audio Production	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 150 F	Television Studio Production	3
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
CRTV 164 F	Advanced Digital Production and Non-Linear Editing for Video	3
CRTV 235 F	On-Air Radio Broadcasting	3
CRTV 290 F	Internship in Communications I	2-4
<b>Select 5-6 units from the following:</b>		<b>5-6</b>
CRTV 127 F	Screenwriting	3
CRTV 133 F	Traffic Reporting	3
CRTV 196 F	Communications Seminars	0.5-3

CRTV 236 F	On-Air Radio Broadcasting - Intermediate	3
CRTV 245AF	Digital Editing, Graphics and Effects	3
CRTV 280 F	Television Production Workshop	2-5
<b>Total Units</b>		<b>37-40</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify key factors pertaining to the business operations of the radio, television and film industries.

**Outcome 2:** Compose written copy for radio, TV, film and the Internet.

**Outcome 3:** Produce radio, internet radio and television recordings using digital audio software.

**Outcome 4:** Calculate proper f-stop settings when given a written example.

## Radio Broadcast News Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A36482

The **Radio Broadcast News Associate in Arts Degree** provides the writing, production and on-air skills necessary for the student to enter the Radio Broadcast News, Traffic Reporting, or Radio Broadcast News field where they may work as producers, writers and broadcasters of newscasts, traffic reports and other on-air content at radio stations, traffic bureaus and production houses, and allows the student to transfer to a four year university. The Radio Broadcast News Associate in Arts Degree requires a total of 18 units chosen from the list below, plus the General Education requirements for this degree.

Code	Title	Units
<b>Required Courses - Select from the list below (18 units):</b>		<b>18</b>
CRTV 122 F	Audio Production Techniques	3
CRTV 128 F	Writing for Radio, TV and Film	3
CRTV 129 F	Broadcast News	3
CRTV 130 F	Broadcast Audio Production	3
CRTV 133 F	Traffic Reporting	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 139 F	Intermediate Broadcast News	3
CRTV 149 F	Advanced Broadcast News	3
CRTV 175 F	Documentary Filmmaking	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Compose an employment package for entry-level employment in the radio Broadcast News or Traffic Reporting industry, broadcast entity or audio production company and may continue their studies at a four year university.

## Radio Broadcast News Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C36478A

The **Radio Broadcast News Certificate** provides the background and skills needed for an entry-level position as a reporter, broadcaster and producer in the Radio Broadcast News industry. Upon completion of this certificate program a student will be prepared for an entry-level position as a reporter, broadcaster and producer in the Radio Broadcast News industry. This certificate requires the completion of 18 units of which 15 are in required courses. An additional 3 units must be chosen from restricted electives. A grade of C or better is required in each course taken. There are 15 units of required courses and 3 units of restricted electives.

Code	Title	Units
<b>Required Courses (15 units):</b>		
CRTV 122 F	Audio Production Techniques	3
CRTV 129 F	Broadcast News	3
CRTV 130 F	Broadcast Audio Production	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 139 F	Intermediate Broadcast News	3
<b>Restricted Electives (3 units):</b>		<b>3</b>
CRTV 133 F	Traffic Reporting	3
CRTV 149 F	Advanced Broadcast News	3
CRTV 175 F	Documentary Filmmaking	3
COMM 105 F	Interpersonal Communication	3
JOUR 110 F	Mass Media Survey	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Compose an employment package for entry-level employment in the radio broadcast news industry as a radio news reporter, traffic reporter and radio news producer.

## Radio Broadcasting Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A36481

The **Radio Broadcasting Associate in Arts Degree Program** is designed to prepare students for entry level employment in Internet, radio broadcasting, audio production in the Film and Television industries, and/or independent audio production studio work. The Radio Broadcasting AA degree requires a total of 18-19 units of which 15 units are required courses. An additional 3-4 units must be chosen from the restricted elective list below.

Code	Title	Units
<b>Required Courses (15 units):</b>		
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 122 F	Audio Production Techniques	3
CRTV 130 F	Broadcast Audio Production	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 235 F	On-Air Radio Broadcasting	3
<b>Restricted Electives (3-4 units):</b>		<b>3-4</b>
CRTV 124 F	Broadcast Advertising Sales	1
CRTV 129 F	Broadcast News	3

CRTV 145 F	Radio and TV Sports Broadcasting	3
CRTV 236 F	On-Air Radio Broadcasting - Intermediate	3
<b>Total Units</b>		<b>18-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Compose an employment package.

**Outcome 2:** Compose a professional demo as part of a broadcast entity.

## Radio Broadcasting Certificate

### Requirements

PROGRAM CODE: 2C21265A

The **Radio Broadcasting Certificate** requires the completion of 25-26 units of which 19 units are in required courses. An additional 6-7 units must be chosen from the restricted electives listed below. A grade of C or better is required in each course taken. Upon completion of this certificate program, the successful student will be prepared for an entry-level job at a radio station, Internet broadcasting entity or broadcast studio.

Code	Title	Units
<b>Required Courses (19 units):</b>		
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 122 F	Audio Production Techniques	3
CRTV 124 F	Broadcast Advertising Sales	1
CRTV 129 F	Broadcast News	3
CRTV 130 F	Broadcast Audio Production	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 235 F	On-Air Radio Broadcasting	3
<b>Restricted Electives (6-7 units):</b>		
CIS 100 F	Introduction to Personal Computers	4
CRTV 128 F	Writing for Radio, TV and Film	3
CRTV 236 F	On-Air Radio Broadcasting - Intermediate	3
CRTV 290 F	Internship in Communications I	2-4
THEA 127 F	Oral Interpretation	3
THEA 129 F	Voice for the Actor	3
<b>Total Units</b>		<b>25-26</b>

## Program Student Learning Outcomes

**Outcome 1:** Compose an employment package for entry-level employment in the radio industry or audio production company, or complete General Education requirements and transfer to a four year university to continue their studies.

## Radio Production Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A08397

The **Radio Production Associate in Arts Degree** is designed to prepare students for entry-level employment in radio broadcasting, employment in the Film industry as an audio editor and producer, employment in post-production for Film and TV, or employment within any industry requiring an audio expert, including corporate media, law enforcement and independent contractor work. This degree requires a total of 18 units of which 12 units

are in required courses. An additional 6 units must be chosen from the restricted units listed below.

Code	Title	Units
<b>Required Courses (12 units):</b>		
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 122 F	Audio Production Techniques	3
CRTV 128 F	Writing for Radio, TV and Film	3
CRTV 130 F	Broadcast Audio Production	3
<b>Restricted Electives (6 units):</b>		
CRTV 124 F	Broadcast Advertising Sales	1
CRTV 129 F	Broadcast News	3
CRTV 133 F	Traffic Reporting	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 235 F	On-Air Radio Broadcasting	3
CRTV 290 F	Internship in Communications I	2-4
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Compose an employment package for entry-level employment in the radio industry, production house, agency, studio or audio production company.

## Sports Broadcasting Certificate

### Requirements

PROGRAM CODE: 2C36357A

The **Sports Broadcasting Certificate** prepares students for entry-level positions in radio, television, internet or cable television sports broadcasting. Students learn how to do play-by-play, color reporting, cover games by remote broadcasts on KBPK and on audio and internet streams. This certificate requires a total of 19 units of which 16 units are in required courses. An additional 3 units must be chosen from the restricted units listed below. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (16 units):</b>		
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 122 F	Audio Production Techniques	3
CRTV 124 F	Broadcast Advertising Sales	1
CRTV 129 F	Broadcast News	3
CRTV 139 F	Intermediate Broadcast News	3
CRTV 145 F	Radio and TV Sports Broadcasting	3
<b>Restricted Electives (3 units):</b>		
CRTV 130 F	Broadcast Audio Production	3
CRTV 135 F	Broadcast TV and Radio Announcing	3
CRTV 146 F	Intermediate Sports Broadcasting	3
CRTV 147 F	Advanced Sports Broadcasting	3
CRTV 149 F	Advanced Broadcast News	3
CRTV 150 F	Television Studio Production	3
CRTV 290 F	Internship in Communications I	2-4
PE 247 F	Sports Management	3
<b>Total Units</b>		<b>19</b>

## Program Student Learning Outcomes

**Outcome 1:** Compose an employment package for entry-level employment in the sports radio industry as a sports reporter, sports producer and sports announcer.

## Television and Film Production Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C21266B

The **Television and Film Production Certificate** (formerly titled **Television-Film Production Certificate**) is designed for students who seek professional careers in the television and film industry. The program provides a professional, technical and creative foundation to help students enter into the industry. Students are given the opportunity to work with industry-standard film and TV equipment and to explore their industry interests through various courses. From film and TV production classes to screenwriting and internship opportunities, students are given the knowledge, skills and experience to explore meaningful career paths. This certificate requires a total of 24-28 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (6 units):</b>		
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 120 F	Media Aesthetics	3
<b>Restricted Courses (18-22 units):</b>		<b>18-22</b>
<i>List A - Select one course from the following (3 units):</i>		
CRTV 150 F	Television Studio Production	3
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
<i>List B - Select one course from the following (3 units):</i>		
CRTV 127 F	Screenwriting	3
CRTV 128 F	Writing for Radio, TV and Film	3
<i>List C - Select from the following (12-16 units):</i>		
CRTV 121 F	American Cinema to the 1960s	3
CRTV 122 F	Audio Production Techniques	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema 1946 to Present	3
CRTV 127 F	Screenwriting	3
CRTV 128 F	Writing for Radio, TV and Film	3
CRTV 131 F	Contemporary American Cinema (formerly Contemporary Cinema)	3
CRTV 150 F	Television Studio Production	3
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
CRTV 160 F	Introduction to 16mm Film Production and Digital Cinematography (formerly Introduction to Filmmaking)	3
CRTV 164 F	Advanced Digital Production and Non-Linear Editing for Video	3
CRTV 175 F	Documentary Filmmaking	3
CRTV 196 F	Communications Seminars	0.5-3

CRTV 280 F	Television Production Workshop	2-5
CRTV 290 F	Internship in Communications I	2-4
DART 182 F	Motion Graphics and Special Effects	3
<b>Total Units</b>		<b>24-28</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify key factors pertaining to the business operations of the television and film industries.

**Outcome 2:** Compose written copy for television or film using proper industry format.

**Outcome 3:** Produce a television/video production from concept to completion using industry standard equipment.

## Television and Film Associate in Arts Degree

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2A08398A

The **Television and Film Associate in Arts Degree** (formerly titled **Television/Film Associate in Arts Degree**) prepares students for careers in the Motion Picture/Television Industry. The program provides a professional, technical and creative foundation to help students enter into the industry while also providing a historical/theoretical background that promotes critical thinking and culturally conscious media makers. Students are given the opportunity to work with industry-standard film and TV equipment and to explore their interests through various courses. From film and TV production classes to screenwriting and internship opportunities, students are given the knowledge, skills and experience to explore meaningful career paths. This degree program requires a total of 18-22 units.

Code	Title	Units
<b>Required Courses (6 units):</b>		
CRTV 118 F	Introduction to Radio, TV and Film	3
CRTV 120 F	Media Aesthetics	3
<b>Restricted Electives (12-16 units):</b>		<b>12-16</b>
<i>Production Courses - Select one course from the following (3 units):</i>		
CRTV 150 F	Television Studio Production	3
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
<i>Writing Courses - Select one course from the following (3 units):</i>		
CRTV 127 F	Screenwriting	3
CRTV 128 F	Writing for Radio, TV and Film	3
<i>Select courses from the following that have not already been selected (6-10 units):</i>		
CRTV 121 F	American Cinema to the 1960s	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema 1946 to Present	3
CRTV 127 F	Screenwriting	3
CRTV 128 F	Writing for Radio, TV and Film	3
CRTV 131 F	Contemporary American Cinema (formerly Contemporary Cinema)	3

CRTV 150 F	Television Studio Production	3
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
CRTV 160 F	Introduction to 16mm Film Production and Digital Cinematography (formerly Introduction to Filmmaking)	3
CRTV 164 F	Advanced Digital Production and Non-Linear Editing for Video	3
CRTV 175 F	Documentary Filmmaking	3
CRTV 227 F	Intermediate Screenwriting	3
CRTV 280 F	Television Production Workshop	2-5
CRTV 290 F	Internship in Communications I	2-4
<b>Total Units</b>		<b>18-22</b>

## Program Student Learning Outcomes

**Outcome 1:** Distinguish how volume of light, distance, color spill, and mixed color temperature can compromise the accurate appearance of color.

**Outcome 2:** Compose written copy for radio, TV, film or the internet.

**Outcome 3:** Demonstrate the ability to effectively direct and/or produce a video production while working in a team..

## Communication Studies

### Faculty

Doug Kresse  
Toni Nielson  
Jeanette Rodriguez  
Joel Salcedo  
Jeffrey Samano  
Matthew Taylor

### Degrees and Certificates

Communication Studies Associate in Arts Degree for Transfer (p. 285)

### Courses

**COMM 100 F Public Speaking** **3 Units**  
54 hours lecture per term. This course is designed to give students concentrated opportunities to communicate their ideas. Emphasis is on developing the speaker's ability to present original subject matter. This is accomplished by the preparation and presentation of four to six informative and persuasive speeches, as well as various in-class assignments and exercises to develop speaking proficiency by skillfully using logic and reasoning. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: COMM 110)

**COMM 105 F Interpersonal Communication** **3 Units**  
54 hours lecture per term. This course explores the variables of the interpersonal communication process as they occur in day-to-day, face-to-face interaction. Topics include self-concept, perception, listening, verbal and non-verbal communication, assertive communication and conflict resolution. Material is presented through lecture, experiential activities, and group discussion. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: COMM 130)

**COMM 120 F Intercultural Communication** **3 Units**  
54 hours lecture per term. This course explores the variables of human symbolic interaction as they occur between persons of differing cultural orientations. This course is theoretical in nature, but will also deal with applied concepts for more successful interaction with other cultures. The scope of the content will encompass the basic areas necessary to involve the student in a critical assessment of how cultures differ in both verbal and non-verbal behaviors; how needs, values and goals are dictated by cultural influences; how interactions can be improved between cultures through a perceptual awareness of these differences. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: COMM 150)

**COMM 124 F Small Group Communication** **3 Units**  
54 hours lecture per term. This course is an introduction to theoretical and applied concepts in small group communication through participation, observation, analysis and evaluation of group processes. Elements of small group behavior to be studied include leadership, roles, norms, networks, message systems, interpersonal needs, decision making, and conflict management. This course includes theory and practice of public speaking. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: COMM 140)

**COMM 135 F Essentials of Argumentation** **3 Units**  
54 hours lecture per term. This course will help an individual develop critical thinking abilities and effective logical support for oral advocacy. The course serves as an introduction to theoretical and applied concepts in argumentation. In-class student presentations will be used to evaluate course areas of research, reasoning, organization, refutation and issue analysis. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: COMM 120)

**COMM 138 F Forensics** **2 Units**  
18 hours lecture and 54 hours lab per term. This course trains students to participate in intercollegiate speech tournaments and public community programs. Areas to be covered include expository speaking, persuasive speaking, impromptu and extemporaneous speaking, oral interpretations, and debate. Field trips and involvement in student activities will be required. Course may be taken four times for credit. (Degree Credit) (CSU) (C-ID: COMM 160B)

## Communication Studies Associate in Arts Degree for Transfer

Division: Humanities

### Requirements

PROGRAM CODE: 2A36916

The **Communication Studies Associate in Arts Degree for Transfer**, also called the Communication Studies AA-T Degree, prepares students to transfer to CSUs that offer bachelor's degrees in Communication Studies. Ed Code Section 66746-66749 states students earning the Communication Studies AA-T degree will be granted priority for admission as a Communication Studies major to a local CSU, as determined by the CSU campus to which the student applies. Students planning to attend other universities will benefit from this degree, as well. Communication Studies prepares students to identify and solve communication problems, to facilitate effective communication in professional and interpersonal interactions to develop collaborative forms of problem solving and decision making. While a baccalaureate degree is recommended preparation for those considering communication focused careers in fields such as education, training and development, sales, community relations, public relations, the ministry, law, business, entertainment,

nonprofit organizations and government, completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. This degree requires a total of 18-21 units. \*COMM 138 F is a course that may be taken up to four times for two units each time. Students may count up to three units of COMM 138 F in List B of the Communication Studies AA-T.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (4 units):</b>		
COMM 100 F	Public Speaking	3
<b>LIST A - (6-7 units):</b>		<b>6-7</b>
COMM 105 F	Interpersonal Communication	3
COMM 124 F	Small Group Communication	3
COMM 135 F	Essentials of Argumentation	3
<b>LIST B - Select from any course below or one not already listed in LIST A (6-8 units):</b>		<b>6-8</b>
COMM 120 F	Intercultural Communication	3
COMM 138 F	Forensics	2
JOUR 110 F	Mass Media Survey	3
or JOUR 110HF	Honors Mass Media Survey	
<b>LIST C - Select from any course below or one not already selected in LIST A or LIST B (3 units):</b>		<b>3</b>
ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF	Honors Cultural Anthropology	
JOUR 101 F	Reporting and Writing	3
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
<b>Total Units</b>		<b>18-21</b>

## Program Student Learning Outcomes

**Outcome 1:** Analyze, construct, and deliver speeches on contemporary socio-political issues.

**Outcome 2:** Criticize and evaluate a variety of public discourse.

# Computer Information Systems

Division: Business and Computer Information Systems

## Faculty

Anna Carlin  
Dale Craig  
Gabriella Fernandez  
Laura Melella  
Brian Roach  
Jane Troop  
Nancy Woolridge

## Degrees and Certificates

- Computer Information Systems Associate in Science Degree (p. 292)
- Computer Information Systems Certificate (p. 292)
- Computer Technician Analyst Certificate (p. 293)
- Computer Technician Apprentice Skills Certificate (p. 294)
- Cyber Security Analyst Certificate (p. 294)
- Cyber Security Associate in Science Degree (p. 294)
- Cyber Security Master Certificate (p. 295)
- Cyber Security Technician Certificate (p. 295)
- Networking Certificate (p. 295)
- Networking Skills Certificate (p. 296)
- Office Applications Apprentice Certificate (p. 296)
- Office Applications Technician Certificate (p. 297)
- Programming Certificate (p. 297)
- Programming Skills Certificate (p. 298)
- Web Design Certificate (p. 298)
- Web Design Skills Certificate (p. 298)

## Courses

**CIS 100 F Introduction to Personal Computers 4 Units**  
72 hours lecture per term. This course introduces students as well as the business professional to the use of the personal computer using state-of-the-art software. Course material includes computer literacy, information literacy, concepts, hardware, software, information systems, structured design techniques, overview of the computer industry, ethics and current issues including virus protection and prevention. Students will also learn how to use the Windows operating system, Microsoft Office (Word, Excel, PowerPoint, Access) and the Internet as it relates to Microsoft Office. This course will satisfy the Area E General Education Requirements for transfer to CSU or UC. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**CIS 100HF Honors Introduction to Personal Computers 4 Units**  
72 hours lecture per term. This Honors-enhanced course introduces students as well as business professionals to the use of the personal computer using state-of-the-art software. Course material includes computer literacy, information literacy, concepts, hardware, software, information systems, structured design techniques, overview of the computer industry, ethics and current issues including virus protection and prevention. Students will also learn how to use the Windows operating system, Microsoft Office (Word, Excel, PowerPoint, Access) and the Internet as it relates to Microsoft Office. (Degree Credit) (CSU)

- CIS 102 F Introduction to Open Source Software** 3 Units  
54 hours lecture per term. This course teaches students to use various Open Source software on a Windows computer. Topics include finding Open Source Software, downloading and installing software, and using typical packages like Open Office and Open CD. Students will also learn how to participate in the Open Source community. (Degree Credit) (CSU)
- CIS 103 F Computer Keyboarding** 2 Units  
36 hours lecture and 18 hours lab per term. This is course is beginning keyboarding for students who wish to learn alphanumeric keyboarding and the 10-key pad. Individualized assignments will help students achieve increased speed and accuracy. (Degree Credit) (CSU)
- CIS 104 F Presentation Graphics** 3 Units  
54 hours lecture and per term. This course is an introduction to business presentation graphics. Topics include planning presentations, creating business presentations and templates, enhancing presentations with graphics, sound, animation, transition, and video and using presentations on a Web server. State-of-the-art software will be used. (Degree Credit) (CSU)
- CIS 106 F Beginning Spreadsheet (MS Excel)** 3 Units  
54 hours lecture per term. This course provides an introduction to spreadsheets in the solution of business problems. Students will create, format and print worksheets that include formulas, functions, charts, relative and absolute cell references, what-if analysis, and 3D worksheets. Students will learn how to create Excel Web pages, design and manipulate Excel tables, and work on group collaboration projects. State-of-the-art software will be used. (Degree Credit) (CSU)
- CIS 107 F Introduction to Operating Systems** 3 Units  
54 hours lecture per term. This course is designed to introduce the operating system on the personal computer and personal computer security. The course will cover the fundamentals of the graphical user interface, mouse operations, how to manipulate the interface, how to use help, search, launch applications, manage files and folders and add/delete hardware and software. Additional topics include Linux, OSX, the Cloud, using end point security software, how virus programs infect computers, and how to protect computers from malicious programs. (Degree Credit) (CSU)
- CIS 109 F Personal Computer Security** 2 Units  
27 hours lecture and 27 hours lab per term. This course introduces the student to computer security topics on personal computers and on the Internet. Students will learn how to protect their own personal computers from malicious software to include trojans, malware, adware, viruses, and other dangerous software. Students will understand current hacking techniques and approaches and learn to protect their personally identifiable information (PII) on the Internet and how to securely send information. (Degree Credit) (CSU)
- CIS 111 F Introduction to Information Systems** 4 Units  
72 hours lecture per term. This course exams information systems and their role in business. Focus will be on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems. (Degree Credit) (CSU) (UC) AA GE (C-ID: BUS 140)
- CIS 111HF Honors Introduction to Information Systems** 4 Units  
72 hours lecture per term. This Honors-enhanced course is an examination of information systems and their role in business. This course will focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects, developing computer-based solutions to business problems. As an Honors course, this class will include enrichment content and activities requiring independent problem-solving and critical thinking skills and collaborative group projects and presentations. (Degree Credit) (CSU) (UC) AA GE (C-ID: BUS 140)
- CIS 120 F Project Management I** 3 Units  
54 hours lecture per term. This course covers project management application skills including planning project scope, analyzing project risk, creating project schedules, communicating project information, managing resources, adding tasks and durations, changing relationships, tracking progress, and closing the project. Also covered are customizing project management software, web resource, and project management certifications. State-of-the-art software will be used. (Degree Credit) (CSU)
- CIS 123 F Beginning Word Processing (MS Word) (formerly Word Processing)** 3 Units  
54 hours per term. This course is designed to teach the student how to use a word processing program to create, edit, and format documents. This course covers the fundamental operations of word processing: typing text, saving, editing, copying, moving, printing, formatting, margins, tabs, footers and headers, footnotes, vertical and horizontal alignment and line spacing. Students will also learn how to create an index, table of contents, and create complex documents that include images. (Degree Credit) (CSU)
- CIS 124 F Advanced Word Processing (MS Word) (formerly Advanced Word)** 3 Units  
*Advisory:* CIS 123 F.  
54 hours lecture per term. This course teaches advanced concepts and techniques for Microsoft Word. Topics include working with long documents, complex formatting, collaborating, and automating Word documents. (Degree Credit) (CSU)
- CIS 130 F Systems Analysis and Design** 3 Units  
54 hours lecture per term. This course is designed to introduce the student to 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. (Degree Credit) (CSU)
- CIS 142 F Database I** 3 Units  
36 hours lecture per term. This course is designed to teach use of state-of-the-art personal database software. The course will cover introductory concepts including database structure and design, editing database records, sorting/indexing records, query techniques, custom form creation, database report design and printing, database relational techniques, and general file management techniques. (Degree Credit) (CSU)
- CIS 148 F Introduction to Personal Computer Communications** 2 Units  
*Advisory:* Familiarity with sending and receiving email.  
27 hours lecture and 27 hours lab per term. This course is an introduction to personal electronic communications and management using state-of-the-art email and scheduling software. Students learn how to connect the software with internet email servers and how to receive and manage email. Students will also learn to manage an electronic calendar, schedule appointments and manage appointment information. (Degree Credit) (CSU)

**CIS 149 F Internet Entertainment****3 Units**

54 hours lecture per term. This course teaches the various elements of entertainment on the Internet. These include how media companies are using the Internet for content distribution and marketing, how various types of Internet Entertainment programs work th client operating systems like Windows, and how to configure clients to use various Internet Entertainment packages. (Degree Credit) (CSU)

**CIS 150 F Introduction to the Internet****3 Units**

54 hours lecture per term. This course is an introduction to the organizational, operational, and technical aspects of the internet. Students will learn how to use a personal computer to access internet and the World Wide Web. Topics include an overview of personal computer operations, the history and philosophy of the internet and its services, configuring a personal computer to connect to the internet, selecting an internet service provider, sending and receiving electronic mail (email), locating network resources using search engines, participating in discussion groups using Web 2.0, downloading internet software. Other topics include developing, creating and posting personal and business web pages using the hypertext markup language (HTML), evaluating internet materials for accuracy and reliability and citing web and internet resources. (Degree Credit) (CSU)

**CIS 152 F Web Design I (formerly Web Page Design II)****3 Units**

54 hours lecture per term. This course presents introductory and advanced topics in Web Page Design. Students will learn how to create web pages that include style sheets, use multimedia objects, plan and manage large-scale websites, use client plug-ins, work with CGI, Java, and other server side technologies, design effective user interfaces, and use elements of dynamic HTML. Other topics include using JavaScript, working with different types of graphic objects, and working with the Document Object Model. Emphasis is placed on learning the Hypertext Markup Language, using and editing graphic files, and creating various types of web pages. (Degree Credit) (CSU)

**CIS 153 F Business Web Graphics****3 Units**

54 hours lecture per term. This course teaches the skills necessary to create business graphics for web pages. Topics include graphic file formats used on web pages, designing and manipulating web components using a graphical editor, using graphical elements in web page design, and generating CSS layers as a result of image slicing. Students will also learn how to effectively optimize images, create hyperlinks from image comps, create navigation elements, add animation, and export HTML and images as part of the overall design of a business web page. (Degree Credit) (CSU)

**CIS 154 F JavaScript Programming I****3 Units**

54 hours lecture per term. This course teaches the student to use the JavaScript programming language with Hyper-Text Markup Language (HTML) pages. Emphasis is placed on creating HTML pages that include JavaScript programs. The student will learn the basic syntax of the JavaScript language, how to create JavaScript programs inside HTML documents, and how to use JavaScript programs to enhance Web pages. (CSU) (Degree Credit)

**CIS 155 F Web Page Multimedia Design I****3 Units****Advisory:** CIS 152 F

This course introduces students to Multimedia Web Design using Adobe Flash CS5 (or current version). Topics include how to create animations and movies for integration into websites and how to create a full website using Flash. Various animation techniques, adding sound, and basic ActionScript for controlling the flow of the movie will be taught. (Degree Credit) (CSU)

**CIS 157 F Web Design II (formerly Dreamweaver I)****3 Units****Advisory:** CIS 152 F.

54 hours lecture per term. This course covers using Dreamweaver to create Web pages. Topics include creating web pages with graphics, links, tables, forms, and Javascript elements. Students will also learn how to import files and graphics into Dreamweaver from other programs. Students should have a working knowledge of the Internet. (Degree Credit) (CSU)

**CIS 159 F Introduction to XML****3 Units**

54 hours lecture per term. This course teaches the basic concepts of XML. Topics include the structure of an XML document, creating XML documents, using Data Definitions, and linking XML documents to other web components. Students should have a working knowledge of HTML. (Degree Credit) (CSU)

**CIS 160 F Introduction to Cyber Security (formerly Introduction to Computer Forensics)****3 Units**

54 hours lecture and 18 lab hours per term. In this course, students will be introduced to the complex world of cyber security and technology. Students will analyze security problems and practice simulated security activities. Topics will address technologies and security-related topics progressing from individual computers to more complex internet-based systems. (Degree Credit) (CSU)

**CIS 165 F Cyber Security and Networking and Web (formerly Computer Forensics and Networking)****3 Units****Advisory:** Basic knowledge of networking concepts.

54 hours lecture and 18 hours lab per term. This course teaches the student how to use computer forensic techniques and tools to investigate and reconstruct network-based data. Students learn the basic operation and structure of a computer network, the various network devices and their operation, and the tools used to investigate a network. Topics include trapping network data, retrieving and analyzing email, tracing network packets, and other security and forensic topics. (Degree Credit) (CSU)

**CIS 166 F Cyber Security and Operating Systems (formerly Operating Systems and Computer Forensics)****3 Units****Advisory:** CIS 160 F.

54 hours lecture and 18 hours lab per term. This course teaches students how to perform computer forensic analysis of data on the Windows, Linux, and Macintosh operating systems. Students will learn about the internals of the operating system, the potential security problems with the operating system, and how to capture static and live data from an operating system. Students will also learn to use some typical network software and hardware forensic tools and how to protect gathered data in a legally acceptable manner. (Degree Credit) (CSU)

**CIS 168 F Cyber Security Software Tools (formerly Tools for Computer and Network Forensics)****3 Units****Advisory:** Basic knowledge of C++

54 hours lecture and 18 hours lab per term. This course teaches students how to use various hardware and software tools to engage in computer and network forensics. Topics include installing, configuring, and using common open source forensic tools, building custom tool kits, modifying tools, and creating new tools. Students will learn how to use C++ to write custom computer and network forensic software tools. (Degree Credit) (CSU)



- CIS 170 F Cisco Networking 1** **3 Units**  
36 hours lecture and 54 hours lab per term. This course focuses on network terminology and protocols. Local Area Networks (LANs), Wide Area Networks (WANs), Open System Interconnection (OSI) model, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. This course is offered through Cisco Local Academy and upon successful course completion, students will receive a certificate from Cisco. (Degree Credit) (CSU)
- CIS 171 F Ethical Hacking (formerly Network Intrusion and Detection)** **3 Units**  
*Advisory:* Basic knowledge of a network operating system and basic networking concepts  
54 hours lecture and 18 hours lab per term. This course teaches ethical hacking through network intrusion and detection techniques. Students learn how computer network security is compromised by use of common intrusion tools. Students also learn how to detect such network intrusions and how to monitor and trap the intruder. Topics include how to successfully penetrate Windows and Linux networks and how to install and use open source tools to detect and protect from such penetration. (Degree Credit) (CSU)
- CIS 172 F Cisco Networking 2** **3 Units**  
*Prerequisite(s):* CIS 170 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course introduces students to router fundamentals, router setup and configuration, network management, routing and routed protocols, and network troubleshooting. Topics include: managing Cisco IOS software, Distance Vector Routing Protocols, TCP/IP suite error and control messages, basic router troubleshooting, and access control lists. This course is offered through Cisco Local Academy and upon successful course completion students receive a certificate from Cisco. (Degree Credit) (CSU)
- CIS 173 F Cisco Networking 3** **3 Units**  
*Prerequisite(s):* CIS 172 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course focuses on advanced IP addressing techniques, Variable Length Subnet Masking (VLSM), intermediate routing protocols (RIP v2, single-area OSPF, EIGRP), command-line interface configuration of switches, Ethernet switching, Virtual LANs (VLANs), Spanning Tree Protocol (STP) and VLAN Trunking Protocol (VTP). This course is offered through Cisco Local Academy and upon successful course completion, students will receive a certificate from Cisco. (Degree Credit) (CSU)
- CIS 174 F Cisco Networking 4** **3 Units**  
*Prerequisite(s):* CIS 173 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course focuses on advanced IP addressing techniques; Network Address Translation (NAT), Port Address Translation (PAT), and DHCP; WAN technology and terminology; PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking. This course is offered through Cisco Local Academy and upon successful course completion students will receive a certificate from Cisco. (Degree Credit) (CSU)
- CIS 176 F Web Page Layout with CMS** **3 Units**  
*Advisory:* CIS 152 F  
54 hours lecture per term. This course provides students with the knowledge, skills, and hands-on experience to create, enhance, and maintain a website created with a content management system (CMS). Students will design sites with articles, blogs, links, news feeds, search components, and other plugins. Knowledge of HTML is highly recommended. (Degree Credit) (CSU)
- CIS 177 F Web Design III (formerly Dreamweaver II)** **3 Units**  
*Advisory:* CIS 157 F or ability to use current version of Dreamweaver to create standards compliant websites is strongly recommended.  
54 hours lecture per term. This project-based, hands-on course uses intermediate development techniques in Dreamweaver to enhance business web pages. Topics include the use of style sheets to create custom classes, link styling, and position elements; manage template-controlled sites, and navigation element control and accessibility. Students will also learn to manage Dreamweaver extensions. (Degree Credit) (CSU)
- CIS 180 F Introduction to Networking Concepts** **4 Units**  
72 hours lecture per term. This class introduces the student to data communications and networking concepts used in businesses. Topics include the major components of data communications networks, local area networks, wide area networks, networking topologies, network protocols, inter-networking, and categorizing network operating systems. (Degree Credit) (CSU)
- CIS 181 F Computer Certification Preparation** **3 Units**  
Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course prepares students for industry standard certifications with both theoretical and practical lessons relating to microcomputer hardware and software. Emphasis is placed on how hardware components function together to make a microcomputer work properly, how software interacts with hardware, and practical methods to protect hardware and software. Topics include installing, configuring, and upgrading personal computer components and peripherals in a networked environment. (Degree Credit) (CSU)
- CIS 182 F Computer Certification Prep II** **3 Units**  
54 hours lecture per term. This course prepares students for industry standard certifications with both theoretical and practical lessons relating to computer hardware and software. Emphasis is placed on how software components function together to make a computer system work properly, how software interacts with hardware, and practice methods to protect hardware and software. Topics include installing, configuring, and upgrading software components in a networked environment. (Degree Credit) (CSU)
- CIS 183 F Network Security Fundamentals** **3 Units**  
*Advisory:* CIS 107 F and CIS 180 F  
54 hours lecture per term. This course is designed to provide students with an overview of network security, and covers terminology, technology, and software used with network security. Students will learn about communication security, infrastructure security and cryptography. Business plans for disaster recovery will be covered. (Degree Credit) (CSU)
- CIS 200 F Fundamentals of Computer Programming** **1 Unit**  
*Advisory:* Knowledge of elementary computer concepts  
18 hours lecture per term. This course will introduce basic programming terminology, concepts, and best practices related to computer programming. Students will learn the basics of writing programs using loops, statements, variables, and functions. Additional topics will include program design, flow charting, basic computer architecture and debugging techniques. (Degree Credit) (CSU)
- CIS 201 F Introduction to Python Programming** **3 Units**  
54 hours lecture per term. This course is an introduction to fundamental concepts and techniques for writing software in the Python programming language. This course covers the syntax and semantics of data types, expressions, exceptions, control structures, input/output, methods, classes and pragmatics of Python programming. (CSU) (Degree Credit)

**CIS 205 F Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)****3 Units**

**Advisory:** CIS 106 F or the ability to create and edit a spreadsheet  
54 hours lecture and 18 hours lab per term. This course teaches advanced concepts with Microsoft Excel. Topics include PivotTables and PivotCharts, using advanced statistical, logical, financial and lookup functions, creating macros, templates and styles and prepare workbooks for distribution. Use of collaboration tools and advanced analysis are included. (Degree Credit) (CSU)

**CIS 212 F Robotic Programming****3 Units**

54 hours lecture per term. This class teaches basic programming concepts by creating applications for physical robotic devices. Students will learn how to connect to these robotic devices, how to design a program that controls the device, and how to download their program to the device. Programming topics include looping, making decisions, variables, and arrays. (Degree Credit) (CSU)

**CIS 217 F Visual Basic Programming I****4 Units**

**Advisory:** CIS 100 F or an understanding of basic computer programming concepts  
72 hours lecture per term. This course covers the fundamentals of the Microsoft Visual Basic programming language. Emphasis is on variables, objects, events, methods, properties, control structures and error trapping. Forms, controls and basic use of an IDE are presented. An introduction to the development cycle, graphical user interface design principles, and documentation is provided. (Degree Credit) (CSU) (UC Credit Limitation)

**CIS 219 F Visual Basic Programming II****3 Units**

**Advisory:** CIS 217 F  
54 hours lecture per term. This course covers various specialized visual basic programming tasks including database management, component level programming, XML processing, distributed network programming, and embedded device programming. Students learn to create programs that read and write to databases, which are structured as components, process XML files, and can be distributed across a network. (Degree Credit) (CSU)

**CIS 220 F Web Server Programming****3 Units**

**Advisory:** CIS 152 F.  
54 hours lecture per term. This course covers topics on Web programming for the Internet and Intranets. Topics include an explanation of how programs are run across the Internet, the various types of Web programs, and how information is loaded into network databases. Programming for both clients and servers will be covered in this class. Students should have a background in Web page design with HTML and have a background in Visual Basic programming. (Degree Credit) (CSU)

**CIS 221 F Introduction to C# Programming****3 Units**

54 hours lecture per term. Students will learn basic programming concepts including variables, logical constructions, and data access. Students will also learn to use the C# programming language to create graphical user interface programs, web programs, and database programs. (Degree Credit) (CSU)

**CIS 222 F Computer Scripting (formerly CGI/Perl Scripting)****3 Units**

**Advisory:** CIS 152 F.  
54 hours lecture and 36 hours lab per term. This course teaches the Perl scripting language. Topics include using Perl in Web Pages with CGI, basic Perl syntax, data types and functions. Topics also include using Perl with files and databases. Students must have a working knowledge of HTML. (Degree Credit) (CSU)

**CIS 223 F Programming in C++****3 Units**

**Advisory:** CIS 226 F,  
This course is designed for students who have some experience with structured programming techniques. Students will learn the C++ programming language as it applies to business applications. Documenting, coding, entering, computing, and executing programs will take place on the personal computer. (Degree Credit) (CSU) (UC)

**CIS 226 F Java Programming I****4 Units**

72 hours lecture per term. This course is an introduction to designing, creating, and debugging Java programs. Students will learn the syntax of the Java programming language, how to design programs using Object Oriented Analysis and Design and how to create stand-alone programs. Emphasis is placed on program design, basic programming constructs including classes, objects, decision structures, repetition structures and inheritance. (Degree Credit) (CSU) (UC)

**CIS 227 F Advanced C# Programming****3 Units**

**Advisory:** CIS 221 F.  
54 hours lecture per term. This is an advanced course in C# programming. Students learn how to create C# networking programs, Web Server programs, complex database programs and mobile applications. (Degree Credit) (CSU)

**CIS 228 F Java Programming II****4 Units**

**Advisory:** CIS 107 F and CIS 226 F.  
72 hours lecture per term. This course covers advanced topics in Java programming. Topics include collections, interfaces, abstract classes, recursion and databases. Students will learn to flowchart user requirements. Students should be familiar with Microsoft Windows and programming. Students should be familiar with Microsoft Windows and with the Java programming language. (Degree Credit) (CSU)

**CIS 229 F XML Programming****3 Units**

**Advisory:** CIS 159 F.  
54 hours lecture and 18 hours lab per term. This course covers XML programming. Topics include using XML parsers in JavaScript and Java, using XML for file input/output, and connecting to XML databases. Students must have a working knowledge of XML. (Degree Credit) (CSU)

**CIS 230 F PHP and MySQL Programming****3 Units**

**Advisory:** CIS 152 F and CIS 154 F  
54 hours lecture per term. This course teaches how to use the PHP Web programming language and MySQL database program to create interactive, database-driven Web sites. Students learn how to create PHP enhanced pages, how to install and configure MySQL, and how to connect Web clients to the database. (Degree Credit) (CSU)

**CIS 240 F Intro to Mobile Applications****4 Units**

**Advisory:** CIS 226 F.  
72 hours lecture per term. This course introduces students to creating mobile applications (apps) through software design, program logic, code development and testing, and utilizing appropriate software development tools. Course material includes fundamentals of mobile design, utilizing graphics and animation, developing interactive apps, building multi-screen applications and how to deploy and publish mobile apps. Students will also learn to use advanced software development tools. (Degree Credit) (CSU)

- CIS 242 F Database II** 3 Units  
*Advisory:* CIS 142 F.  
 54 hours lecture per term. This course teaches advanced topics in personal databases using state-of-the-art database software. Students will learn how to design and implement complex databases, how to create complex queries and how to use Structured Query Language, how to create personal databases with other applications, and how to write database macro programs. Other topics include the theory of database design, interfacing personal databases with external databases, and creating internet personal databases. Students in this course should have fundamental skills in using a personal database. (Degree Credit) (CSU)
- CIS 255 F Web Page Multimedia Design II** 3 Units  
*Advisory:* CIS 155 F.  
 54 hours lecture per term. This course teaches advanced concepts in Flash. Students learn how to write ActionScript and use advanced features in Flash to create sophisticated websites and animations. Topics include creating dynamic drop-down menus, pre-loaders, working with external movie files and sound, and connecting to a MySQL database. Students should have a working knowledge of beginning Flash concepts. (Degree Credit) (CSU)
- CIS 270 F SQL Server Administration** 3 Units  
*Advisory:* CIS 180 F and CIS 107 F.  
 54 hours lecture and 18 hours lab per term. This course introduces students to the administration of Microsoft SQL Server. Students learn an overview of the SQL server environment, installing and administering SQL server, user and database management, and operating SQL server in a networking environment. Emphasis is placed on installing and administering SQL server, setting up user accounts and use access, and managing resources. (Degree Credit) (CSU)
- CIS 280 F Introduction to Oracle: SQL and PL/SQL** 3 Units  
*Advisory:* CIS 142 F with a grade of "C" or better  
 54 hours lecture and 18 hours lab per term. This course offers students an extensive introduction to database technology. The class covers the concepts of relational databases and the powerful SQL and PL/SQL programming languages. Students are taught to create and maintain database objects and to store, retrieve, and manipulate data. In addition, students learn to create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Demonstrations and hands-on practice reinforce the fundamental concepts. (Degree Credit) (CSU)
- CIS 281 F Introduction to Networking Hardware** 3 Units  
 54 hours lecture and 18 hours lab per term. This course builds on students' knowledge of basic networking concepts and theory through hands-on experience. The course will provide students with an in-depth understanding of network infrastructure, standards and technologies. Students will gain hands-on experience with current network design issues, protocols, and components. Hands-on experience will also include working with wired and wireless standards and network components such as servers, routers, switches, hubs and firewalls. (Degree Credit) (CSU)
- CIS 285 F Windows Server** 3 Units  
*Advisory:* CIS 107 F and CIS 180 F  
 54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Server and enterprise networks. Students learn an overview of the Windows environment, installing and administering servers, domain management and networking. Emphasis is placed on managing a Windows network, setting up user accounts and user access, and managing resources. (Degree Credit) (CSU)
- CIS 286 F Web Server Management** 3 Units  
*Advisory:* CIS 180 F and CIS 107 F with a grade of "C" or better  
 54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Information Server and enterprise networks. Students learn an overview of the Windows environment, installing and administering Internet information server, domain management and networking. Emphasis is placed on managing Internet information server, setting up user accounts and user access, and managing resources. (Degree Credit) (CSU)
- CIS 287 F Exchange Server** 3 Units  
*Advisory:* CIS 180 F and CIS 040 F.  
 54 hours lecture and 18 hours lab per term. This course introduces students to the administration of Microsoft Exchange Server. Students learn an overview of the Exchange server environment, installing and administering Exchange server, user and database management, and operating Exchange server in a networking environment. Emphasis is placed on installing and administering Exchange server, setting up user accounts and user access, and managing resources. (Degree Credit) (CSU)
- CIS 289 F Windows Active Directory** 3 Units  
*Advisory:* CIS 107 F and CIS 180 F  
 54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Active Directory and enterprise networks. Students learn an overview of the Windows environment, installing and administering DNS servers, Active Directory management and networking. Emphasis is placed on managing a Windows Active Directory network, setting up user accounts and user access and managing resources. (Degree Credit) (CSU)
- CIS 290 F Linux and UNIX Operating System** 3 Units  
*Advisory:* CIS 107 F.  
 54 hours lecture and 18 hours lab per term. This course is an introduction to the Linux/UNIX operating system. Topics include configuring UNIX, using Linux/UNIX utilities to manage files and resources, and using Linux/UNIX on a network. Other topics include configuring common UNIX graphical user interfaces, solving operating system problems, and interfacing Linux/UNIX with other operating systems. Students should be familiar with another operating system such as Microsoft Windows or Windows NT. (Degree Credit) (CSU)
- CIS 295 F Computer Information Systems Internship** 2-4 Units  
 18 hours lecture and 75-225 hours of supervised employment or 60-180 hours of unpaid internship per term. This course is designed to provide work experience directly related to the student's area of study in Computer Information Systems. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Course awards 1 unit per 75 hours of paid internship or 1 unit per 60 hours of unpaid internship. (Degree Credit) (CSU)
- CIS 298 F Advanced Computer Topics** 3 Units  
 54 hours lecture per term. This course introduces advanced topics for students who wish to increase their knowledge and skills in various areas of computer information systems. Emphasis is placed on the current and future trends of information technology in today's computer industry. (Degree Credit) (CSU)

# Computer Information Systems Associate in Science Degree

## Requirements

PROGRAM CODE: 2S03831

The **Computer Information Systems Associate in Science Degree** is designed to prepare students for employment in programming, networking, website design, database design and administration, cyber-security, project management or game design. Students learn in a well-equipped technical environment for instruction and lab. CIS courses are taught providing hands-on experience in the use of industry-standard hardware, application software, operating systems, networking, and programming tools. This degree also requires students to select a "Career Track" from the sets of Restricted Electives. This degree requires 20-23 units.

Code	Title	Units
<b>Required Courses (14 units):</b>		
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
or CIS 111 F	Introduction to Information Systems	
or CIS 111HF	Honors Introduction to Information Systems	
CIS 152 F	Web Design I (formerly Web Page Design II)	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 201 F	Introduction to Python Programming	3
<b>Restricted Electives - Select from ONE CAREER TRACK below to meet the minimum program unit requirements.</b>		<b>6-9</b>
<i>Cyber Security Career Track (8 units):</i>		
CIS 107 F	Introduction to Operating Systems	3
CIS 109 F	Personal Computer Security	2
CIS 160 F	Introduction to Cyber Security (formerly Introduction to Computer Forensics)	3
<b>OR</b>		
<i>Programming Career Track (6-7 units):</i>		
CIS 142 F	Database I	3
CIS 223 F	Programming in C++	3
or CIS 226 F	Java Programming I	
<b>OR</b>		
<i>Network Technician Career Track (6 units):</i>		
CIS 181 F	Computer Certification Preparation	3
CIS 182 F	Computer Certification Prep II	3
<b>OR</b>		
<i>Network Administration Career Track (9 units):</i>		
CIS 107 F	Introduction to Operating Systems	3
CIS 285 F	Windows Server	3
CIS 290 F	Linux and UNIX Operating System	3
<b>OR</b>		
<i>Web Design Career Track (6 units):</i>		
CIS 157 F	Web Design II (formerly Dreamweaver I)	3
CIS 176 F	Web Page Layout with CMS	3
<b>OR</b>		
<i>Information System Project Management Career Track (9 units):</i>		
CIS 106 F	Beginning Spreadsheet (MS Excel)	3
CIS 120 F	Project Management I	3

CIS 123 F	Beginning Word Processing (MS Word) (formerly Word Processing)	3
<b>OR</b>		
<i>Game Design Career Track (6 units):</i>		
CISG 100 F	Introduction to Computer Game Design	3
CISG 110 F	Introduction to Programming for Computer Games	3
<b>Total Units</b>		<b>20-23</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common Business Software programs.

**Outcome 2:** Demonstrate an understanding of common computer technology-related terms.

**Outcome 3:** Demonstrate the ability to be effective communicators using common Business communication tools.

**Outcome 4:** Demonstrate knowledge of common internet-related technologies and software.

# Computer Information Systems Certificate

## Requirements

PROGRAM CODE: 2C21267

The **Computer Information Systems Certificate** is designed to prepare students for employment in programming, networking, website design, database design and administration, cyber-security, business principles and more. Students learn in a well-equipped technical environment for instruction and lab. CIS courses are taught providing hands-on experience in the use of industry-standard hardware, application software, operating systems, networking, and programming tools. A minimum grade of C is required in each course taken. This certificate requires 38-42 units.

Code	Title	Units
<b>Required Courses (11 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 217 F	Visual Basic Programming I	4
<b>Select one course from the following (3-5 units):</b>		<b>3-5</b>
ACCT 001 F	Accounting for Small Business	3
ACCT 101AF	Financial Accounting	5
BUS 151 F	Business Mathematics	3
<b>Select one course from the following (3 units):</b>		<b>3</b>
BUS 111 F	Business Communications	3
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
<b>Select one course from the following (3 units):</b>		<b>3</b>
BUS 182 F	Mobile Applications for Business - APPs (formerly Doing Business Online)	3
CIS 104 F	Presentation Graphics	3
CIS 153 F	Business Web Graphics	3
CIS 298 F	Advanced Computer Topics	3
MKT 151 F	Digital Marketing (formerly New Media)	3

<b>Select one course from the following (4 units):</b>	<b>4</b>
CIS 100 F Introduction to Personal Computers	4
CIS 111 F Introduction to Information Systems	4
<b>Select one course from the following (2-3 units):</b>	<b>2-3</b>
CIS 106 F Beginning Spreadsheet (MS Excel)	3
CIS 123 F Beginning Word Processing (MS Word) (formerly Word Processing)	3
CIS 124 F Advanced Word Processing (MS Word) (formerly Advanced Word)	3
CIS 148 F Introduction to Personal Computer Communications	2
CIS 150 F Introduction to the Internet	3
CIS 205 F Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)	3
<b>Select one course from the following (3 units):</b>	<b>3</b>
CIS 142 F Database I	3
CIS 242 F Database II	3
CIS 270 F SQL Server Administration	3
CIS 280 F Introduction to Oracle: SQL and PL/SQL	3
<b>Select one course from the following (3 units):</b>	<b>3</b>
CIS 152 F Web Design I (formerly Web Page Design I)	3
CIS 154 F JavaScript Programming I	3
CIS 155 F Web Page Multimedia Design I	3
CIS 157 F Web Design II (formerly Dreamweaver I)	3
CIS 159 F Introduction to XML	3
CIS 177 F Web Design III (formerly Dreamweaver II)	3
CIS 255 F Web Page Multimedia Design II	3
CISG 100 F Introduction to Computer Game Design	3
<b>Select one or two courses (3-4 units):</b>	<b>3-4</b>
CIS 200 F Fundamentals of Computer Programming	1
CIS 212 F Robotic Programming	3
CIS 219 F Visual Basic Programming II	3
CIS 220 F Web Server Programming	3
CIS 221 F Introduction to C# Programming	3
CIS 222 F Computer Scripting (formerly CGI/Perl Scripting)	3
CIS 223 F Programming in C++	3
CIS 226 F Java Programming I	4
CIS 227 F Advanced C# Programming	3
CIS 228 F Java Programming II	4
CIS 229 F XML Programming	3
CIS 230 F PHP and MySQL Programming	3
CISG 110 F Introduction to Programming for Computer Games	3
CISG 160 F C# for Game Programming	3
CISG 165 F C++ for Game Programming	3
CISG 170 F Java for Game Programming	3
CISG 175 F Multimedia Game Programming	3
CISG 182 F DirectX Graphics Programming	3
CISG 185 F Artificial Intelligence in Game Programming	3
CISG 190 F Programming Multiuser Online Games	3
<b>Select one course from the following (3 units):</b>	<b>3</b>

CIS 160 F Introduction to Cyber Security (formerly Introduction to Computer Forensics)	3
CIS 165 F Cyber Security and Networking and Web (formerly Computer Forensics and Networking)	3
CIS 166 F Cyber Security and Operating Systems (formerly Operating Systems and Computer Forensics)	3
CIS 168 F Cyber Security Software Tools (formerly Tools for Computer and Network Forensics)	3
CIS 170 F Cisco Networking 1	3
CIS 171 F Ethical Hacking (formerly Network Intrusion and Detection)	3
CIS 172 F Cisco Networking 2	3
CIS 173 F Cisco Networking 3	3
CIS 174 F Cisco Networking 4	3
CIS 183 F Network Security Fundamentals	3
CIS 281 F Introduction to Networking Hardware	3
CIS 285 F Windows Server	3
CIS 286 F Web Server Management	3
CIS 287 F Exchange Server	3
CIS 289 F Windows Active Directory	3
CIS 290 F Linux and UNIX Operating System	3
<b>Total Units</b>	<b>38-42</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common business software programs.

**Outcome 2:** Demonstrate an understanding of common computer technology-related terms.

**Outcome 3:** Demonstrate the ability to be effective communicators using common business communication tools.

**Outcome 4:** Demonstrate knowledge of common internet-related technologies and software.

## Computer Technician Analyst Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C37146A

The **Computer Technician Analyst Certificate** is designed for students who intend to pursue employment in network administration or computer technical support positions. This certificate option requires completion of the Computer Technician Apprentice Skills Certificate and additionally provides advanced courses in Windows server, Linux/UNIX, and windows active directory. This certificate requires 22 units of required courses. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses from Level One: Apprentice (13 units):</b>		
CIS 107 F	Introduction to Operating Systems	3

CIS 180 F	Introduction to Networking Concepts	4
CIS 181 F	Computer Certification Preparation	3
CIS 281 F	Introduction to Networking Hardware	3
<b>Required Courses (9 units):</b>		
CIS 285 F	Windows Server	3
CIS 289 F	Windows Active Directory	3
CIS 290 F	Linux and UNIX Operating System	3
<b>Total Units</b>		<b>22</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of networking and operating systems terminology.

**Outcome 2:** Explain basic troubleshooting processes and procedures from initial diagnosis to final documentation and reporting.

**Outcome 3:** Identify, install, and troubleshoot computer and network hardware components.

## Computer Technician Apprentice Skills Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C37099A

The **Computer Technician Apprentice Skills Certificate** is designed to provide students with the fundamentals of operating systems, networks and the certification process. This certificate will prepare students who intend to pursue employment in entry-level network administration or computer technical support positions. This certificate requires 13 units of required courses. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (13 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 181 F	Computer Certification Preparation	3
CIS 281 F	Introduction to Networking Hardware	3
<b>Total Units</b>		<b>13</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of networking and operating systems terminology.

**Outcome 2:** Operate, install, manage and troubleshoot major server operating systems.

**Outcome 3:** Evaluate the computer network needs of an organization.

## Cyber Security Analyst Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C36689

The **Cyber Security Analyst Certificate** is designed to prepare students who intend to pursue employment in entry-level cyber security/forensics positions. The program provides additional technical and managerial skills to analyze cyber security threats from a variety of perspectives at the enterprise and national levels. This certificate option requires completion of the Cyber Security Technician Certificate and additionally provides advanced courses in ethical hacking, cyber-security tools, and networking. A grade of C or better is required in each course taken. This certificate requires 21 units.

Code	Title	Units
<b>Required Courses - Cyber Security Technician (12 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 109 F	Personal Computer Security	2
CIS 160 F	Introduction to Cyber Security (formerly Introduction to Computer Forensics)	3
CIS 180 F	Introduction to Networking Concepts	4
<b>Required Courses (9 units):</b>		
CIS 183 F	Network Security Fundamentals	3
CIS 222 F	Computer Scripting (formerly CGI/Perl Scripting)	3
CIS 290 F	Linux and UNIX Operating System	3
<b>Total Units</b>		<b>21</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of cyber security technology.

**Outcome 2:** Formulate, update and communicate short- and long-term organizational cyber security strategies and policies.

**Outcome 3:** Measure the performance of security systems within an enterprise level information system.

## Cyber Security Associate in Science Degree

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2A40795

The **Cyber Security Associate in Science Degree** provides the skills for students to become highly skilled computer systems security professionals and to train individuals for entry-level positions as data security analyst, systems security administrators, and network security administrators. In this program, students will master the latest security technologies and will examine the issues of information security awareness, network security hardware, systems and network security planning and defense, network security organization, and the legal and ethical issues associated with cybersecurity. This degree requires 33 units in the major in addition to other degree requirements.

Code	Title	Units
<b>Required Courses (33 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 109 F	Personal Computer Security	2
CIS 160 F	Introduction to Cyber Security (formerly Introduction to Computer Forensics)	3

CIS 165 F	Cyber Security and Networking and Web (formerly Computer Forensics and Networking)	3
CIS 166 F	Cyber Security and Operating Systems (formerly Operating Systems and Computer Forensics)	3
CIS 168 F	Cyber Security Software Tools (formerly Tools for Computer and Network Forensics)	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 183 F	Network Security Fundamentals	3
CIS 222 F	Computer Scripting (formerly CGI/Perl Scripting)	3
CIS 290 F	Linux and UNIX Operating System	3
CIS 171 F	Ethical Hacking (formerly Network Intrusion and Detection)	3
<b>Total Units</b>		<b>33</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of cyber security terminology.

**Outcome 2:** Assess and implement continuous network monitoring and provide real-time security solutions.

**Outcome 3:** Assess cyber security risk management policies in order to adequately protect an organization's critical information and assets.

## Cyber Security Master Certificate

### Requirements

**PROGRAM CODE:** 2C36690

The **Cyber Security Master Certificate** is designed to prepare students who intend to pursue employment in cyber-security/forensics positions. The program provides a comprehensive knowledge and training in technical and managerial skills to analyze cyber-security threats from a variety of perspectives at the enterprise and national levels. This certificate option requires completion of the Cyber Security Analyst and Technician Certificates and additionally provides advanced courses in programming and operating systems. This certificate requires 33 units of required courses. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses - Cyber Security Technician (12 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 109 F	Personal Computer Security	2
CIS 160 F	Introduction to Cyber Security (formerly Introduction to Computer Forensics)	3
CIS 180 F	Introduction to Networking Concepts	4
<b>Required Courses - Cyber Security Analyst (9 units):</b>		
CIS 183 F	Network Security Fundamentals	3
CIS 222 F	Computer Scripting (formerly CGI/Perl Scripting)	3
CIS 290 F	Linux and UNIX Operating System	3
<b>Required Courses (12 units):</b>		
CIS 165 F	Cyber Security and Networking and Web (formerly Computer Forensics and Networking)	3

CIS 166 F	Cyber Security and Operating Systems (formerly Operating Systems and Computer Forensics)	3
CIS 168 F	Cyber Security Software Tools (formerly Tools for Computer and Network Forensics)	3
CIS 171 F	Ethical Hacking (formerly Network Intrusion and Detection)	3
<b>Total Units</b>		<b>33</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of cyber security technology.

**Outcome 2:** Assess and implement continuous network monitoring and provide real-time security solutions.

**Outcome 3:** Assess cyber security risk management policies in order to adequately protect an organization's critical information and assets.

## Cyber Security Technician Certificate

### Requirements

**PROGRAM CODE:** 2C36702A

The **Cyber Security Technician Certificate** is designed to prepare students who intend to pursue employment in entry-level cyber-security/forensics positions. The program provides the foundation skills to analyze cyber-security threats from a variety of perspectives at the enterprise and national levels. This certificate requires 12 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (12 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 109 F	Personal Computer Security	2
CIS 160 F	Introduction to Cyber Security (formerly Introduction to Computer Forensics)	3
CIS 180 F	Introduction to Networking Concepts	4
<b>Total Units</b>		<b>12</b>

## Program Student Learning Outcomes

**Outcome 1:** Use a working vocabulary of cyber security terminology.

**Outcome 2:** Assess, troubleshoot, maintain and update an enterprise level information security system.

**Outcome 3:** Evaluate the computer network and information security needs of an organization.

## Networking Certificate

### Requirements

**PROGRAM CODE:** 2C36693

The **Networking Certificate** is designed to prepare students for a career using computer networks in business. Students receive hands-on instruction on how to operate, install, configure, troubleshoot, upgrade, and maintain computer networks as well as basic network security. A grade of C or better is required in each course taken. This certificate requires 31 units

Code	Title	Units
<b>Required Courses (22 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 170 F	Cisco Networking 1	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 183 F	Network Security Fundamentals	3
CIS 281 F	Introduction to Networking Hardware	3
CIS 285 F	Windows Server	3
CIS 290 F	Linux and UNIX Operating System	3
<b>Choose from the following list (9 units):</b>		
CIS 172 F	Cisco Networking 2	3
CIS 173 F	Cisco Networking 3	3
CIS 174 F	Cisco Networking 4	3
CIS 270 F	SQL Server Administration	3
CIS 280 F	Introduction to Oracle: SQL and PL/SQL	3
CIS 286 F	Web Server Management	3
CIS 287 F	Exchange Server	3
<b>Total Units</b>		<b>31</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common business software programs.

**Outcome 2:** Demonstrate an understanding of common computer technology-related terms.

**Outcome 3:** Demonstrate the ability to be effective communicators using common business communication tools.

**Outcome 4:** Demonstrate knowledge of common internet-related technologies and software.

## Networking Skills Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C00034

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **Networking Skills Certificate** prepares the student for a career using computer networks in business. This will include skills in installing and managing Windows networks. The Networking Certificate Program requires a total of 12 units of which 9 are required and 3 may be chosen from the restricted electives listed. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (10 units):</b>		
CIS 180 F	Introduction to Networking Concepts	4
CIS 183 F	Network Security Fundamentals	3
CIS 285 F	Windows Server	3
<b>Restricted Electives (3 units):</b>		
CIS 281 F	Introduction to Networking Hardware	3
CIS 286 F	Web Server Management	3

CIS 287 F	Exchange Server	3
CIS 289 F	Windows Active Directory	3
CIS 290 F	Linux and UNIX Operating System	3
<b>Total Units</b>		<b>13</b>

## Office Applications Apprentice Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C37173A

The **Office Applications Apprentice Certificate** is designed to prepare students for a career using computers and computer software in a business environment including modern business software applications such as word processing, spreadsheets, presentations, and databases. A grade of C or better is required in each course taken. This certificate requires 20-21 units.

Code	Title	Units
<b>Required Courses (11 units):</b>		
CIS 104 F	Presentation Graphics	3
CIS 106 F	Beginning Spreadsheet (MS Excel)	3
CIS 123 F	Beginning Word Processing (MS Word) (formerly Word Processing)	3
CIS 148 F	Introduction to Personal Computer Communications	2
<b>Select from the following list of courses (6 units):</b>		
CIS 124 F	Advanced Word Processing (MS Word) (formerly Advanced Word)	3
CIS 152 F	Web Design I (formerly Web Page Design II)	3
CIS 153 F	Business Web Graphics	3
CIS 205 F	Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)	3
<b>Select from the following list of courses (3-4 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 281 F	Introduction to Networking Hardware	3
CIS 285 F	Windows Server	3
<b>Total Units</b>		<b>20-21</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common business software programs.

**Outcome 2:** Demonstrate an understanding of common computer technology-related terms.

**Outcome 3:** Demonstrate the ability to be effective communicators using common business communication tools.

**Outcome 4:** Demonstrate knowledge of common internet-related technologies and software.



# Office Applications Technician Certificate

Division: Business and Computer Information Systems

## Requirements

PROGRAM CODE: 2C37108

The **Office Applications Technician Certificate** is designed to prepare students for a career using computers and computer software in a business environment including communication software like email and modern business software applications such as word processing, spreadsheets, presentations, and databases. A grade of C or better is required in each course taken. This degree requires 29-31 units.

Code	Title	Units
<b>Required Courses - Office Applications Apprentice (11 units):</b>		
CIS 104 F	Presentation Graphics	3
CIS 106 F	Beginning Spreadsheet (MS Excel)	3
CIS 123 F	Beginning Word Processing (MS Word) (formerly Word Processing)	3
CIS 148 F	Introduction to Personal Computer Communications	2
<b>Required Courses - Office Applications Apprentice Certificate (6 units):</b>		
CIS 124 F	Advanced Word Processing (MS Word) (formerly Advanced Word)	3
CIS 152 F	Web Design I (formerly Web Page Design II)	3
CIS 153 F	Business Web Graphics	3
CIS 205 F	Advanced Spreadsheet - MS Excel (formerly Spreadsheet Advanced MS Excel)	3
<b>Required Courses - Office Applications Apprentice Certificate (3-4 units):</b>		
CIS 107 F	Introduction to Operating Systems	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 281 F	Introduction to Networking Hardware	3
CIS 285 F	Windows Server	3
<b>Select from the following (9-10 units):</b>		
ACCT 107 F	Computerized Accounting with QuickBooks	3
CIS 107 F	Introduction to Operating Systems	3
CIS 124 F	Advanced Word Processing (MS Word) (formerly Advanced Word)	3
CIS 142 F	Database I	3
CIS 152 F	Web Design I (formerly Web Page Design II)	3
CIS 153 F	Business Web Graphics	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 281 F	Introduction to Networking Hardware	3
CIS 285 F	Windows Server	3
<b>Total Units</b>		<b>29-31</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common business software programs.

**Outcome 2:** Demonstrate an understanding of common computer technology-related items.

**Outcome 3:** Demonstrate the ability to be effective communicators using common business communication tools.

**Outcome 4:** Demonstrate knowledge of common internet-related technologies and software.

# Programming Certificate

Division: Business and Computer Information Systems

## Requirements

PROGRAM CODE: 2C36698

The **Programming Certificate** is designed to prepare students for an entry-level job in the programming field. Students receive a grounding in a breadth of current programming languages and may select electives focusing on web programming, Java and mobile applications programming, database management or game programming. A grade of C or better is required in each course taken. This certificate requires 34-35 units.

Code	Title	Units
<b>Required Courses (25 units):</b>		
CIS 130 F	Systems Analysis and Design	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 200 F	Fundamentals of Computer Programming	1
CIS 217 F	Visual Basic Programming I	4
CIS 221 F	Introduction to C# Programming	3
CIS 223 F	Programming in C++	3
CIS 226 F	Java Programming I	4
CIS 230 F	PHP and MySQL Programming	3
<b>OR</b>		
<b>For a focus on JAVA and MOBILE APPLICATIONS, select three courses (9-10 units):</b>		<b>9-10</b>
CIS 222 F	Computer Scripting (formerly CGI/Perl Scripting)	3
CIS 227 F	Advanced C# Programming	3
CIS 228 F	Java Programming II	4
CIS 229 F	XML Programming	3
CIS 240 F	Intro to Mobile Applications	4
<b>OR</b>		
<b>For a focus on WEB PROGRAMMING, select three courses (9 units):</b>		
CIS 152 F	Web Design I (formerly Web Page Design II)	3
CIS 155 F	Web Page Multimedia Design I	3
CIS 157 F	Web Design II (formerly Dreamweaver I)	3
CIS 255 F	Web Page Multimedia Design II	3
<b>OR</b>		
<b>For a focus on DATABASE MANAGEMENT, select three courses (9 units):</b>		
CIS 142 F	Database I	3
CIS 242 F	Database II	3
CIS 270 F	SQL Server Administration	3
CIS 280 F	Introduction to Oracle: SQL and PL/SQL	3

CIS 285 F	Windows Server	3
CIS 286 F	Web Server Management	3
<b>OR</b>		
<b>For a focus on GAME PROGRAMMING, select three courses (9 units):</b>		
CISG 110 F	Introduction to Programming for Computer Games	3
CISG 160 F	C# for Game Programming	3
CISG 165 F	C++ for Game Programming	3
CISG 170 F	Java for Game Programming	3
CISG 175 F	Multimedia Game Programming	3
CISG 182 F	DirectX Graphics Programming	3
CISG 185 F	Artificial Intelligence in Game Programming	3
CISG 190 F	Programming Multiuser Online Games	3
<b>Total Units</b>		<b>34-35</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common business software programs.

**Outcome 2:** Demonstrate an understanding of common computer technology-related terms.

**Outcome 3:** Demonstrate the ability to be effective communicators using common business communication tools.

**Outcome 4:** Demonstrate knowledge of common internet-related technologies and software.

## Programming Skills Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C00023

The **Programming Skills Certificate** requires the completion of 9-9.5 units of which 6 units are in required classes listed below. A grade of C or better is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (6 units):</b>		
CIS 217 F	Visual Basic Programming I	4
CIS 223 F	Programming in C++	3
or CIS 226 F	Java Programming I	
<b>Restrictive Electives (3-3.5 units):</b>		<b>3-3.5</b>
CIS 212 F	Robotic Programming	3
CIS 219 F	Visual Basic Programming II	3
CIS 222 F	Computer Scripting (formerly CGI/Perl Scripting)	3
CIS 228 F	Java Programming II	4
CIS 229 F	XML Programming	3
CIS 230 F	PHP and MySQL Programming	3
<b>Total Units</b>		<b>10-10.5</b>

## Web Design Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C37106A

The **Web Design Certificate** is designed to prepare students for employment in web development and web programming. Students will learn the skills to plan, create, and implement websites for a wide variety of businesses and organizations. Emphasis will be placed on modern technologies, responsive design, and usability. Students are prepared for entry-level jobs such as a Web designer, web content specialist or a WordPress developer. A grade of C or better is required in each course taken. This certificate requires 18 units.

Code	Title	Units
<b>Required Courses from the Web Design Skills Certificate (9 units):</b>		
CIS 150 F	Introduction to the Internet	3
or CIS 153 F	Business Web Graphics	
CIS 152 F	Web Design I (formerly Web Page Design I)	3
CIS 157 F	Web Design II (formerly Dreamweaver I)	3
<b>Required Courses (9 units):</b>		
CIS 176 F	Web Page Layout with CMS	3
or CIS 177 F	Web Design III (formerly Dreamweaver II)	
CIS 230 F	PHP and MySQL Programming	3
BUS 170 F	Principles of E-Business	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common Business Software programs.

**Outcome 2:** Demonstrate an understanding of common computer technology-related terms.

**Outcome 4:** Demonstrate knowledge of common Internet-related technologies and software.

## Web Design Skills Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C37148A

The **Web Design Skills Certificate** was created to teach core skills that are directly transferable to the workplace. Designed for students, working adults, artists, and designers interested in exploring the expanding field of web design. The course sequence provides the foundational skills required for those wishing to build websites for personal and professional applications. A grade of C or better is required in each course. This certificate requires 16 units.

Code	Title	Units
<b>Required Courses (16 units):</b>		
CIS 150 F	Introduction to the Internet	3

CIS 152 F	Web Design I (formerly Web Page Design II)	3
CIS 153 F	Business Web Graphics	3
CIS 154 F	JavaScript Programming I	3
CIS 157 F	Web Design II (formerly Dreamweaver I)	3
CIS 200 F	Fundamentals of Computer Programming	1
<b>Total Units</b>		<b>16</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency in one or more common business/web design software programs.

**Outcome 2:** Demonstrate an understanding of common web design and computer technology-related terms.

**Outcome 3:** Demonstrate the ability to create a website using business/web design software programs.

## Computer Information Systems - Gaming

Division: Business and Computer Information Systems

### Faculty

Anna Carlin  
Dale Craig  
Gabriella Fernandez  
Laura Melella  
Brian Roach  
Jane Troop  
Nancy Woolridge

### Degrees and Certificates

Computer Game Design Certificate (p. 300)  
Computer Game Programming Skills Certificate (p. 300)

### Courses

#### CISG 100 F Introduction to Computer Game Design 3 Units

54 hours lecture per term. This is an introductory survey class in computer game design. Students will learn the basics of how computer games are designed and created. This includes an overview of computer game graphics, computer game programming, game level design, game music development, computer game strategy and playability, and the entire computer game development process as well as the current gaming business. (Degree Credit) (CSU)

#### CISG 101 F Advanced Computer Game Design 3 Units

**Advisory:** CISG 100 F.  
54 hours lecture per term. This course teaches students advanced topics in game design. Students learn how to implement a game design process, how to design for narrative, characters and puzzles. Students will also learn how to design games for a variety of game environments including multiplayer games, virtual reality games and multiplayer games. This course is a continuation of topics in CISG 100 F. (Degree Credit) (CSU)

#### CISG 110 F Introduction to Programming for Computer Games 3 Units

**Advisory:** Basic knowledge of a procedural or object-oriented programming language

This is an introductory survey course on computer game programming. Students will learn the basic game programming design process, the use and creation of game programming tools, basic game data structures, programming artificial intelligence, graphics programming, online and multi-user game design, 3-D engine design, and how game programmers interact with game designers. (Degree Credit) (CSU)

#### CISG 112 F Foundations of Game Engine Programming 3 Units

**Advisory:** Basic knowledge of a procedural or object-oriented programming language.

54 hours lecture per term. This is an introductory survey course on computer game engines. Students will learn the basic features of game engines, specific features of different kinds of game engines, and how to use game engines to create computer games. (Degree Credit) (CSU)

#### CISG 160 F C# for Game Programming 3 Units

**Advisory:** Basic knowledge of C# programming language 54 hours lecture per term.

This course teaches use of the C# programming language to create computer games. Students will review the C# programming language, learn how C# uses .NET resources, and learn how to use DirectX. Topics also include using 3-D, sound, and animation. (Degree Credit) (CSU)

#### CISG 165 F C++ for Game Programming 3 Units

**Advisory:** Knowledge of basic C++ programming

This course teaches students how to use C++ to write computer games. Topics include a review of basic C++, how to use various data structures in C++, how to access hardware devices, how to use various graphics libraries, and how to use basic networking resources in C++. Students will learn how to create basic graphics and text-based games in C++. (Degree Credit) (CSU)

#### CISG 170 F Java for Game Programming 3 Units

**Advisory:** Basic knowledge of Java programming language.

54 hours lecture and 18 hours lab per term. This course teaches students how to use Java to write computer games. Topics include a review of basic Java, how to use various data structures in Java, how to access hardware devices, how to use various graphics libraries, and how to use basic networking resources in Java. Students will learn how to create basic graphics and text-based games in JAVA. (Degree Credit) (CSU)

#### CISG 175 F Multimedia Game Programming 3 Units

**Advisory:** Knowledge of Flash

This course teaches students how to use various multimedia tools to create games. Topics include a review of basic multimedia and virtual reality concepts, basic multimedia and VR APIs, and writing programs that use these APIs. (CSU) (Degree Credit)

#### CISG 182 F DirectX Graphics Programming 3 Units

**Advisory:** Basic knowledge of C++ and .NET

NET 54 hours lecture per term. This course introduces students to DirectX graphics programming tools using C++. Students learn the basics of DirectX, the general structure of the graphic libraries, and how to use DirectX to create 2-D and 3-D graphics, transform graphics, manage sound, and how it is used to create computer games. (CSU) (Degree Credit)

#### CISG 185 F Artificial Intelligence in Game Programming 3 Units

**Advisory:** General knowledge of the C++ or Java programming language.

This course introduces the use of Artificial Intelligence techniques in game programming. Students learn the foundation of computer Artificial Intelligence techniques, and how such techniques are implemented in computer code and how they are used in different kinds of computer games. (Degree Credit) (CSU)

**CISG 190 F Programming Multiuser Online Games 3 Units**

**Advisory:** Basic knowledge of a modern object-oriented programming language and general network concepts

54 hours lecture per term. This class is an introduction to programming online multi-player games. Students learn basic networking technology, network programming, and are introduced to the operation of network servers. Students also learn how to write code to link client computer games with network game servers and how to create server side game scripts. (Degree Credit) (CSU)

## Computer Game Design Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40659

The **Computer Game Design Certificate (formerly Computer Game Design Skills Certificate)** is designed to prepare students for opportunities with studios, corporations, organizations, educational institutions, government agencies, advertising and entertainment industries that require visual and interactive content to support, enhance, entertain and/or market their product or service. A minimum grade of C is required in each course taken. This certificate requires 18 units.

Code	Title	Units
<b>Required Courses (15 units):</b>		
CISG 100 F	Introduction to Computer Game Design	3
CISG 110 F	Introduction to Programming for Computer Games	3
CIS 153 F	Business Web Graphics	3
CIS 155 F	Web Page Multimedia Design I	3
CIS 255 F	Web Page Multimedia Design II	3
<b>Restricted Electives (3 units):</b>		
CISG 160 F	C# for Game Programming	3
CISG 170 F	Java for Game Programming	3
CISG 175 F	Multimedia Game Programming	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Create an effective game analysis document.

**Outcome 2:** Create a basic game design document.

**Outcome 3:** Plan and implement game mechanics in a script-based game prototyping language.

## Computer Game Programming Skills Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40677

The **Computer Game Programming Skills Certificate** provides students with an opportunity to learn how to create interactive computer games, including Web-based ones. It targets students who want to

acquire skills needed for game design and programming. The required Game Programming course utilizes programming language chosen by instructor. The Certificate offers a choice between the three most popular programming languages: Java, C++ and C#. The certificate is designed to prepare students to become game programming generalists. Before beginning core courses in programming, students should have a thorough understanding of computer operating systems. A minimum grade of C is required in each course taken. This certificate requires 15 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
CISG 100 F	Introduction to Computer Game Design	3
CISG 110 F	Introduction to Programming for Computer Games	3
CISG 182 F	DirectX Graphics Programming	3
CISG 190 F	Programming Multiuser Online Games	3
<b>Restricted Electives (3 units):</b>		
CISG 160 F	C# for Game Programming	3
CISG 165 F	C++ for Game Programming	3
CISG 170 F	Java for Game Programming	3
CISG 175 F	Multimedia Game Programming	3
CISG 185 F	Artificial Intelligence in Game Programming	3
<b>Total Units</b>		<b>15</b>

### Program Student Learning Outcomes

**Outcome 1:** Plan the major programming components of a typical computer game.

**Outcome 2:** Create a basic game that implements a defined set of game mechanics.

**Outcome 3:** Create a basic game that manipulates and manages game resources such as graphics, sound, and video.

## Computer Science

Division: Mathematics and Computer Science

### Faculty

Andrew Clifton  
Scott Edwards  
Luciano Rodriguez

### Degrees and Certificates

- Computer Science Associate in Science Degree (p. 301)

## Courses

### CSCI 123 F Introduction to Programming Concepts in C++ 4 Units

**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 142 F, or MATH 143 F, with a grade of C or better.

72 hours lecture per term. This course is an introduction to the basic principles of programming using C++ as the development tool. Topics include the structure and design of algorithms, input/output, branching structures, functions, recursion, built-in data types, arrays, structures, files, pointers and elementary operations on linked structures. The object-oriented programming paradigm will be introduced. Topics include encapsulation, polymorphism, libraries, streams, inheritance and abstract data types. Students will design algorithms, write external and internal documentation and design and write source code in C++. (Degree Credit) (CSU) (UC) AA GE

### CSCI 133 F Data Structures in C++ 4 Units

**Prerequisite(s):** CSCI 123 F with a grade of C or better

72 hours lecture per term. This is a course in algorithm design and data structures implemented using C++. Data structures examined are arrays, linked lists, stacks, queues, trees, tables, and graphs. Algorithm topics include hashing, sorting, heaps, searches and algorithm efficiency using Big-O notation. Students will create and modify class libraries to implement these structures. (Degree Credit) (CSU) (UC) (C-ID: COMP 132)

### CSCI 223 F C Language for Math and Science 4 Units

**Prerequisite(s):** CSCI 123 F with a grade of C or better or one prior programming language

72 hours lecture per term. This course is an introduction to the C programming language. One of the latest C compilers will be used on a personal computer. Topics include data types, functions, pointers, bit manipulation and file I/O. Students will design, code and test program applications in the mathematics, scientific and engineering environments. (Degree Credit) (CSU) (UC)

### CSCI 241 F Computer Organization and Assembly Language Programming 4 Units

**Prerequisite(s):** CSCI 133 F or CSCI 223 F with a grade of C or better.

72 hours lecture per term. This course is an introduction to assembly language programming. It includes reviews of computer organization, programming techniques and concepts, addressing techniques, input/output, hardware architecture, and data structures. (Degree Credit) (CSU) (UC)

## Computer Science Associate in Science Degree

### Requirements

PROGRAM CODE: 2S08408

The **Computer Science Associate in Science Degree** is designed to prepare students to transfer to colleges and universities that offer bachelor's degrees in computer science. Students with a degree in computer science may pursue careers in many areas of industry, such as aerospace, health, finance, entertainment, and more. Opportunities for specialties in the field include software engineering and development, computer networks and security, telecommunications, mobile computing, game programming, internet and web technology, embedded systems and real-time programming, systems analysis, information technology, distributed computing and artificial intelligence. This degree requires 23-24 units of which 12 units are in required courses. An additional 11-12 units must be chosen from the lists below. A grade of C or better is required in all courses.

Code	Title	Units
<b>Required Courses suggested in the following sequence (12 units):</b>		
CSCI 123 F	Introduction to Programming Concepts in C++	4
CSCI 133 F	Data Structures in C++	4
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
<b>Select one course pairing (7-8 units):</b>		<b>7-8</b>
MATH 171 F	Discrete Mathematics	4
<i>and</i>		
MATH 172 F	Graph Theory and Linear Algebra	4
<i>OR</i>		
MATH 170 F	Discrete Structures	4
<i>and</i>		
MATH 255 F	Linear Algebra	3
<b>Restricted Electives (4 units):</b>		<b>4</b>
CSCI 223 F	C Language for Math and Science	4
CSCI 241 F	Computer Organization and Assembly Language Programming	4
CSCI 223 F	C Language for Math and Science	4
CSCI 241 F	Computer Organization and Assembly Language Programming	4
<b>Total Units</b>		<b>23-24</b>

## Program Student Learning Outcomes

**Outcome 1:** Write computer programs to solve problems.

**Outcome 2:** Design and implement Abstract Data Types using object-oriented techniques.

## Construction

Division: Technology and Engineering

### Faculty

Jonathan Keller

### Degrees and Certificates

- Construction Estimating Skills Certificate (p. 303)
- Construction Inspection Associate in Science Degree (p. 304)
- Construction Inspection Certificate (p. 304)
- Construction Management Associate in Science Degree (p. 304)
- Construction Technology Associate in Science Degree (p. 305)
- Construction Technology Certificate (p. 305)

## Courses

### **CSTR 005 F Construction Technology Lab** 0.5-2 Units

**Corequisite(s):** CSTR 006 F or CSTR 007 F or CSTR 014 F or CSTR 015 F or CSTR 016 F or CSTR 020 F or CSTR 022 F or CSTR 028 F or CSTR 030 F or CSTR 031 F or CSTR 032 F or CSTR 033 F or CSTR 034 F or CSTR 035 F or CSTR 038 F or CSTR 040 F or CSTR 041 F or CSTR 042 F or CSTR 050 F or CSTR 060 F or CSTR 065 F or CSTR 100 F or CSTR 102 F or CSTR 104 F or CSTR 108 F or CSTR 110 F or CSTR 112 F or CSTR 116 F, with a grade of C or better.

Open Entry/Open Exit. 27-108 hours lab per term. This course offers students the opportunity to further develop their skills at hand and power tool operations, and to devote more time to construction projects. One-half unit credit will be given for each twenty-seven hours of lab participation. (Degree Credit)

### **CSTR 006 F Residential Plumbing and Mechanical Systems** 3 Units

54 hours lecture per term. This course covers the fundamentals of residential plumbing, heating, ventilation and air conditioning (HVAC). (Degree Credit)

### **CSTR 007 F Residential Electrical Systems** 2 Units

27 hours lecture and 27 hours lab per term. This course is an introduction to load center sizing, wiring circuits and grounding systems used in residential construction. Lab exercises will cover the wiring of lighting and power circuits, dedicated circuits, grounding and troubleshooting. (Degree Credit)

### **CSTR 014 F Contractors License Law** 3 Units

54 hours lecture per term. This course covers the problems in the legal and practical aspects of contracting: Contractors' License Law, the Mechanic's Lien Law, labor code, Worker's Compensation, and Insurance. Business management for both the private and public sector will also be covered. This course will prepare the student to pass the Law and Business Exam required for a Contractor's License in the State of California. (Degree Credit)

### **CSTR 015 F Construction Management** 3 Units

54 hours lecture per term. This course covers the organization and problems associated with managing a building construction business. Topics will include sales, bidding, contracts, purchasing, scheduling, safety, and community relations. (Degree Credit)

### **CSTR 016 F Business Administration for the Construction Industry** 3 Units

54 hours lecture per term. This course provides the student with instruction in the practical aspects of business administration concepts and practices within the construction industry. The course surveys successful operating techniques, business structure, business plans, ownership, accounting, marketing, finance, taxation and business regulations. (Degree Credit)

### **CSTR 020 F Remodeling and Additions Construction I** 4 Units

**Prerequisite(s):** CSTR 100 F with a grade of C or better.

36 hours lecture and 108 hours lab per term. This course is an introduction to the fundamentals of residential room additions and remodeling construction with an emphasis on print reading, starting the job, tools, materials, scheduling, estimating, job progress and people relations. Instructions on tie-ins, foundations, plumbing, framing, roofing, electrical and mechanical areas will also be covered. (Degree Credit)

### **CSTR 022 F Remodeling and Additions Construction II** 4 Units

**Prerequisite(s):** CSTR 102 F and CSTR 102 F, with a grade of C or better

36 hours lecture and 108 hours lab per term. This course will provide advanced experiences in finish work in remodeling and additions to include patching and finish carpentry, electrical, plumbing, and heating. (Degree Credit)

### **CSTR 028 F Introduction to Alternative Energy** 3 Units

54 hours lecture per term. This course provides an overview of the world energy situation and a study into alternate energy sources. Solar water heating, solar space heating and cooling, photovoltaics, geothermal, wind generators, nuclear, transportation energy types and others will be studied. (Degree Credit)

### **CSTR 030 F Construction Plans Reading (formerly Construction Blueprint Reading)** 3 Units

54 hours lecture per term. This course provides an interpretation of architectural working drawings as they relate to residential and light commercial construction. The meaning of various lines, symbols, and conventions as well as construction documents will be covered. Students entering this program may enter a variety of construction related fields such as Carpentry, Masonry, or Construction Inspection. (Degree Credit)

### **CSTR 031 F International Building Code** 3 Units

54 hours lecture per term. This course covers topics from the most recently-published International Building Code. This course is designed to give the student a view of the origins of the codes, why we need them, who enforces them, and generally how they work. Students will study the building codes as they pertain to commercial and industrial construction. Field trips may be required outside of regularly-scheduled class time. (Degree Credit)

### **CSTR 032 F Uniform Plumbing Code** 3 Units

54 hours lecture per term. This course covers topics from the most recent Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials. (Degree Credit)

### **CSTR 033 F Commercial Construction Blueprint Reading** 3 Units

**Advisory:** Knowledge and understanding of residential blueprints.

54 hours lecture per term. This course emphasizes the interpretation of commercial architectural drawings as they relate to commercial construction industry. Contract documents, specifications, site work, structural steel construction, reinforced concrete, mechanical systems, and electrical systems will be covered. (Degree Credit)

### **CSTR 034 F National Electrical Code** 3 Units

54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent National Electrical Code as published by the National Fire Protection Association. (Degree Credit)

### **CSTR 035 F California Accessibility and Energy Codes** 3 Units

54 hours lecture per term. This course offers an interpretation and application of the California Code of Regulations (Title 24) as it pertains to various types of structures within the building industry. Special emphasis will be placed on California Energy Regulations and modifications for the disabled for accessibility requirements. Field trips may be required during class time. (Degree Credit)

### **CSTR 038 F Uniform Mechanical Code** 3 Units

54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent Uniform Mechanical Code as published by the International Conference of Building Officials. This course will study the codes related to commercial and industrial construction. (Degree Credit)

### **CSTR 039 F Commercial Mechanical Code** 3 Units

54 hours lecture per term. This course has been designed for the individual who deals with the design of heating, cooling, ventilation and refrigeration in larger, more complex type buildings. Training received in this course will make the individual aware of the areas where the Building and Mechanical Codes overlap. (Degree Credit)

**CSTR 040 F Building Design - Hazard Materials 3 Units**

54 hours lecture per term. This course is designed to introduce the student to the provisions of the Building and Fire Codes affecting the storage, handling and use of hazardous materials. Emphasis will be placed on the requirements for the safety aspects of the codes and recognized standards for solutions. Instruction will focus on problem solving with compliance to the building standards. (Degree Credit)

**CSTR 041 F International Residential Code 3 Units**

54 hours lecture per term. This course covers topics from the most recently published adoption of the International Residential Code. Students will study the International Residential Code (IRC) as a comprehensive, stand-alone residential code that creates minimum regulations for one- and two-family dwellings of three stories or less. This course brings together all buildings, plumbing, mechanical, fuel gas, energy and electrical provisions for one- and two-family residences. Students will study the residential codes as they pertain to residential construction. (Degree Credit)

**CSTR 042 F Residential Steel Frame Construction 4 Units**

54 hours lecture and 54 hours lab per term. This is a comprehensive course that covers the fundamentals of utilizing light frame steel for residential and light commercial. Course emphasizes the safe use of hand and power tools, construction terminology, plan interpretation, and construction practices for foundation systems, and wall, ceiling, and roof framing. Field trips may be required outside of regularly-scheduled class time. (Degree Credit)

**CSTR 050 F Computer Design Software for the Contractor 2 Units**

27 hours lecture and 45 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using computer architectural design software to prepare students in the preparation of designs, blueprints, and material lists for the construction industry. Students will create programs that demonstrate features and functions using the architectural design software. (Degree Credit)

**CSTR 060 F Computer Estimating in Construction 3 Units**

36 hours lecture and 54 hours lab per term. This course provides the student with instruction in the concepts and practices with using computer estimating software for construction estimator positions within the construction industry. Students will process programs that demonstrate features and functions of the estimating software. Knowledge and understanding of blueprint reading is beneficial. (Degree Credit)

**CSTR 065 F Construction Project Scheduling 3 Units**

36 hours lecture and 54 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using project scheduling software currently used in the construction industry. Students will learn the practical application practices and demonstrate their ability to use the software and concepts associated with construction scheduling. Field trips may be required outside of regularly-scheduled class time. (Degree Credit)

**CSTR 100 F Residential Construction 4 Units**

54 hours lecture and 54 hours lab per term. This course emphasizes the safe use of hand and power tools, construction terminology, plan interpretation and construction practices in: ground work, foundation systems, wall framing, ceiling framing, roof framing, and roofing materials. Field trips may be required outside of regularly-scheduled class time. (CSU) (Degree Credit)

**CSTR 102 F Residential Finish Carpentry 4 Units**

54 hours lecture and 54 hours lab per term. This course covers units of instruction to include tool usage and safety, terminology, drywall installation and finishing, setting of door frames and hanging doors, installation of casing and base, finish hardware, paneling, railings, stairs, and trim/detail. Field trips may be required outside of regularly-scheduled class time. (CSU) (Degree Credit)

**CSTR 104 F Concrete and Masonry 3 Units**

45 hours lecture and 27 hours lab per term. This is a basic concrete construction course which includes use of concrete and masonry tools and forming, placing, finishing, and testing concrete. Field trips may be required outside of regularly-scheduled class time. (CSU) (Degree Credit)

**CSTR 108 F Surveying for Builders 2 Units**

18 hours lecture and 54 hours lab per term. This is a course for builders and contractors, both general and sub. It includes surveying instruments, surveying practice for construction limited to plot layouts, simple topography as on hillside lots, establishing grade points, using bench marks and other references. Basic applied trigonometry will be reviewed. (CSU) (Degree Credit)

**CSTR 110 F Residential Estimating 3 Units**

54 hours lecture per term. This course stresses residential blueprint reading, estimating, and material listing. Includes site preparation, foundations, framing, exterior finish, interior finish, roofing, hardware, and various specialty trade subcontracts. (CSU) (Degree Credit)

**CSTR 112 F Construction Materials, Specifications and Purchasing 2 Units**

36 hours lecture per term. This course covers the study of building materials as used in modern building construction and how they are represented in working drawings and specifications. (CSU) (Degree Credit)

**CSTR 116 F Residential Construction Practice I 4 Units**

**Prerequisite(s):** CSTR 100 F with a grade of C or better.

36 hours lecture and 108 hours lab per term. This course provides actual practice in the construction of a house project. Course emphasizes the correct and safe use of tools, rough framing problems, rough electrical, rough plumbing, mechanical systems, roofing, flashing, and exterior finish. (CSU) (Degree Credit)

**CSTR 118 F Residential Construction Practice II 4 Units**

**Prerequisite(s):** CSTR 102 F and CSTR 116 F, with a grade of C or better

36 hours lecture and 108 hours lab per term. This course provides actual practice in the finish work of the house project. Course work includes insulating, drywalling, door installation, finish hardware, finish plumbing, finish electrical, finish trim, painting, and any finishing processes that are deemed necessary to complete a house project. (CSU) (Degree Credit)

## Construction Estimating Skills Certificate

### Requirements

**PROGRAM CODE:** 2C39271

The **Construction Estimating Certificate** Program is designed to prepare students to perform estimations and bidding of construction work which is part of the construction building trade as well as other professions associated closely with the trade. Students will study the phases of a building construction project to develop an overview and understanding of the building construction industry. This certificate requires a total of 17 units in required courses. A grade of C or better is required in each

course taken. At least one half of the units toward this certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (17 units):</b>		
CSTR 015 F	Construction Management	3
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
CSTR 060 F	Computer Estimating in Construction	3
CSTR 065 F	Construction Project Scheduling	3
CSTR 110 F	Residential Estimating	3
CSTR 112 F	Construction Materials, Specifications and Purchasing	2
<b>Total Units</b>		<b>17</b>

## Program Student Learning Outcomes

**Outcome 1:** Calculate an estimated cost from pricing and quantity information.

**Outcome 2:** Use plans, specifications and contracts in estimating exercises.

# Construction Inspection Associate in Science Degree

## Requirements

PROGRAM CODE: 2S13208

The **Construction Inspection Associate in Science Degree** is designed to prepare students with building code knowledge for entry-level employment in the construction industry. This degree requires a total of 21 units. A grade of C or better is required in each course taken. At least half of the units towards this degree must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (21 units):</b>		
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
CSTR 031 F	International Building Code	3
CSTR 032 F	Uniform Plumbing Code	3
CSTR 034 F	National Electrical Code	3
CSTR 035 F	California Accessibility and Energy Codes	3
CSTR 038 F	Uniform Mechanical Code	3
CSTR 041 F	International Residential Code	3
<b>Total Units</b>		<b>21</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an ability to interpret California building codes as they relate to building construction.

**Outcome 2:** Develop the ability and understanding to assess new and existing residential, commercial and industrial structures by utilizing jurisdiction-approved drawings.

# Construction Inspection Certificate

## Requirements

PROGRAM CODE: 2C21272

The **Construction Inspection Certificate** is designed to prepare students to become building inspectors, construction inspectors, public works and facility inspectors or similar occupations. Construction and building inspectors ensure that new construction, changes, or repairs comply with local and national building codes and ordinances, zoning regulations, and contract specifications. This certificate requires a total of 28-30 units. A grade of C or better is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (18 units):</b>		
CSTR 031 F	International Building Code	3
CSTR 032 F	Uniform Plumbing Code	3
CSTR 034 F	National Electrical Code	3
CSTR 035 F	California Accessibility and Energy Codes	3
CSTR 038 F	Uniform Mechanical Code	3
CSTR 041 F	International Residential Code	3
<b>Restricted Electives (10-12 units):</b>		<b>10-12</b>
CSTR 006 F	Residential Plumbing and Mechanical Systems	3
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
CSTR 104 F	Concrete and Masonry	3
CSTR 108 F	Surveying for Builders	2
TECH 081 F	Technical Mathematics I	3
TECH 088 F	Technical Science	3
TECH 127 F	Industrial Safety	2
<b>Total Units</b>		<b>28-30</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify building occupancies.

**Outcome 2:** Select a specific code application.

**Outcome 3:** Identify a typical set of residential or light commercial construction plans and analyze, interpret, extract and define basic structural and finish components and/or systems necessary for project construction.

# Construction Management Associate in Science Degree

## Requirements

PROGRAM CODE: 2S03844

The **Construction Management Associate in Science Degree** is designed to prepare students for employment in the construction industry. This degree prepares students for a variety of careers in the construction industry and related fields, such as estimators, project managers and schedulers, surveyors, specifiers, quality control supervisors, materials testers, construction materials and equipment salespersons, owners' representatives and site inspectors. Individuals interested in developing small independent construction contracting businesses will also find this



degree useful toward achieving that goal. This degree requires a total of 24-27 units. A grade of C or better is required in each course taken. At least half of the units towards this degree must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (24-27 units):</b>		
<i>Complete at least 24 units from the following list:</i>		
ACCT 101AF	Financial Accounting	5
BUS 100 F	Introduction to Business	3
BUS 180 F	Small Business Management	3
CIS 100 F	Introduction to Personal Computers	4
CSTR 014 F	Contractors License Law	3
CSTR 015 F	Construction Management	3
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
CSTR 110 F	Residential Estimating	3
CSTR 112 F	Construction Materials, Specifications and Purchasing	2
<b>Total Units</b>		<b>24-27</b>

### Program Student Learning Outcomes

**Outcome 1:** Interpret architectural and construction drawings and documents, demonstrating knowledge of various building materials and methods and related building technologies.

**Outcome 2:** Describe the features and characteristics of the building projects used in the trade, from framing materials, sheathing and roof covering to interior/exterior finish.

**Outcome 3:** Investigate and resolve problems in construction planning, scheduling and management.

**Outcome 4:** Demonstrate leadership in creating and maintaining a safe working environment.

## Construction Technology Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03839

The **Construction Technology Associate in Science Degree** is designed to prepare students for positions in the construction trade. A student can seek employment in private or public organizations as a cost estimator; project planner; construction coordinator; building inspector; and a variety of other positions associated with the construction and building trade. The course work in this degree also helps the student prepare for California Contractors State Board Examination. This degree requires a total of 24-27 units. At least one half of the units toward the degree must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (24-27 units):</b>		
<i>Complete at least 24 units from the following list:</i>		
CSTR 006 F	Residential Plumbing and Mechanical Systems	3
CSTR 007 F	Residential Electrical Systems	2

CSTR 014 F	Contractors License Law	3
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
CSTR 042 F	Residential Steel Frame Construction	4
CSTR 100 F	Residential Construction	4
CSTR 102 F	Residential Finish Carpentry	4
CSTR 104 F	Concrete and Masonry	3
CSTR 108 F	Surveying for Builders	2
CSTR 110 F	Residential Estimating	3
CSTR 112 F	Construction Materials, Specifications and Purchasing	2
CSTR 116 F	Residential Construction Practice I	4
CSTR 118 F	Residential Construction Practice II	4
<b>Total Units</b>		<b>24-27</b>

### Program Student Learning Outcomes

**Outcome 1:** Differentiate between a builder's level and a transit.

**Outcome 2:** Name the three qualifies of a building.

**Outcome 3:** Review a typical set of residential or light commercial construction plans and analyze, interpret, extract and define basic structural and finish components and/or systems necessary for project construction.

**Outcome 4:** Locate, identify, and correctly apply building code constraints to a specific design or construction problem.

## Construction Technology Certificate

### Requirements

PROGRAM CODE: 2C21271A

The **Construction Technology Certificate** is designed to lead to entry-level employment in the construction industry as well as industry-related positions. This certificate requires a total of 29-32.5 units. A grade of C or better is required in each course taken. At least half of the units toward this certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (17 units):</b>		
CSTR 006 F	Residential Plumbing and Mechanical Systems	3
CSTR 100 F	Residential Construction	4
CSTR 102 F	Residential Finish Carpentry	4
CSTR 104 F	Concrete and Masonry	3
CSTR 110 F	Residential Estimating	3
<b>Restricted Electives (12-15.5 units):</b>		
CSTR 005 F	Construction Technology Lab	0.5-2
CSTR 007 F	Residential Electrical Systems	2
CSTR 014 F	Contractors License Law	3
CSTR 015 F	Construction Management	3
CSTR 016 F	Business Administration for the Construction Industry	3
CSTR 020 F	Remodeling and Additions Construction I	4
CSTR 022 F	Remodeling and Additions Construction II	4
CSTR 028 F	Introduction to Alternative Energy	3

CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
CSTR 031 F	International Building Code	3
CSTR 032 F	Uniform Plumbing Code	3
CSTR 033 F	Commercial Construction Blueprint Reading	3
CSTR 034 F	National Electrical Code	3
CSTR 035 F	California Accessibility and Energy Codes	3
CSTR 038 F	Uniform Mechanical Code	3
CSTR 039 F	Commercial Mechanical Code	3
CSTR 040 F	Building Design - Hazard Materials	3
CSTR 041 F	International Residential Code	3
CSTR 042 F	Residential Steel Frame Construction	4
CSTR 050 F	Computer Design Software for the Contractor	2
CSTR 060 F	Computer Estimating in Construction	3
CSTR 065 F	Construction Project Scheduling	3
CSTR 108 F	Surveying for Builders	2
CSTR 112 F	Construction Materials, Specifications and Purchasing	2
CSTR 116 F	Residential Construction Practice I	4
CSTR 118 F	Residential Construction Practice II	4
<b>Total Units</b>		<b>29-32.5</b>

## Program Student Learning Outcomes

**Outcome 1:** Interpret plans to facilitate project layouts.

**Outcome 2:** Apply math calculations, formulas, and measurement techniques required in the carpentry trade.

**Outcome 3:** Use and operate construction tools safely and efficiently.

**Outcome 4:** Locate, identify, and correctly apply building code constraints to a specific design or construction problem.

**Outcome 5:** Estimate costs of overall projects layout.

## Cosmetology

Division: Technology and Engineering

### Faculty

Celia Assef  
Charlotte Jimmons  
Wendy Perez  
Yvonne Salazar  
Marcu Wade

### Degrees and Certificates

- Cosmetology Associate in Science Degree (p. 309)
- Cosmetology Certificate (p. 309)
- Cosmetology Instructor Associate in Science Degree (p. 309)
- Esthetician Certificate (p. 310)

## Courses

### COSM 041 F Esthetician: Level 1

11 Units

**Prerequisite(s):** 10th grade education or equivalent.

**Advisory:** Must be 17 years of age when applying for State Board Examination.

135 hours lecture and 198 hours lab per term. This course includes basic skin care procedures and techniques; analysis of the skin; facial treatments (manual, electrical and chemical); facial massage manipulations; temporary hair removal (tweezing and waxing); makeup techniques and applications; health, safety and sanitation precautions and procedures; bacteriology, chemistry, electricity, anatomy and physiology; professional ethics, hygiene, personality development, personal and professional management. Related subjects, as they are applicable to esthetics, are covered. This course is designed for preparation of the California Board of Barbering and Cosmetology Examination, and a successful career as an esthetician. This is the first of two consecutive segments. Pivot Point Member School (Degree Credit)

### COSM 042 F Esthetician: Level 2

11 Units

**Prerequisite(s):** COSM 041 F with a grade of C or better.

**Advisory:** Must be 17 years of age when applying for State Board Examination.

135 hours lecture and 198 hours lab per term. This course includes an advanced study of skin care procedures and techniques; analysis of the skin; facial treatments (manual, electrical and chemical); facial massage manipulations (European, lymphatic and acupressure); temporary hair removal (tweezing, depilatories and waxing); make-up techniques and applications; hygiene, health, safety and sanitation precautions and procedures; chemistry, electricity; professional ethics, growth and personality development; personal, professional and business management; advanced topics and procedures (aromatherapy, spa treatments, chemical exfoliation). Related subjects, as they are applicable to esthetics are covered. This course is designed for preparation for the California Board of Barbering and Cosmetology Examination, and a successful career as an esthetician. This is the second of two consecutive segments. Pivot Point Member School. (Degree Credit)

### COSM 043 F Advanced Topics in Esthetics

0.5-3 Units

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better or valid Esthetician or Cosmetology license.

**Advisory:** Completed 10th grade level or its equivalent

54 hours lecture and 162 hours lab per term. This course is designed to meet the needs of the Esthetician industry that requires advanced training, continuing education, and provide professional growth for licensed estheticians and cosmetologists. The course will be offered in modules of advanced topics. Unit credit may range from .5-3 units per module. Consult the class schedule to verify specific topic areas and credit offered for each topic and fees. Pivot Point Member School. (Degree Credit)

### COSM 046 F Advanced Makeup - Microdermabrasion

4 Units

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better or a valid Esthetician or Cosmetology License.

**Advisory:** Completed 10th grade or equivalent.

36 hours lecture and 108 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education, and provide professional growth for licensed estheticians and cosmetologists. This course will be offered in two modules. Module One will cover advanced makeup and Module Two will cover Microdermabrasion. Consult the class schedule to verify specific topic areas; credit offered for each topic and fees. Pivot Point Member School.

**COSM 047 F Advanced Exfoliation-Microdermabrasion 2 Units**

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better, or a valid Esthetician or Cosmetology license.

**Advisory:** Completed 10th grade or equivalent

18 hours lecture and 54 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education and professional growth for licensed estheticians and cosmetologists. This module will cover advanced exfoliation using microdermabrasion techniques. Consult the class schedule to verify specific class meeting dates, credit offered and fees. Pivot Point Member School.

**COSM 048 F Advanced Makeup - Air Brush 2 Units**

**Prerequisite(s):** COSM 042 F or COSM 055EF with a grade of C or better or a valid Esthetician or Cosmetology license.

**Advisory:** Completed 10th grade or equivalent.

18 hours lecture and 54 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education, and provides professional growth for licensed estheticians and cosmetologists. This module will cover advanced makeup-air brush techniques. Consult the class schedule to verify specific class meeting dates, credit offered and fees. Pivot Point Member School.

**COSM 055AF Cosmetology - Level 1 11 Units**

**Prerequisite(s):** 10th grade education or equivalent.

**Advisory:** Must be 17 years of age when applying for State Board Examination. Authorized or required by statute or regulation or licensing agency.

Authorized or required by statute or regulation or licensing agency. 135 hours lecture and 207 hours lab per term. This course includes basic hair styling, manicures, facials, day make-up, permanent waving, scalp treatments, hair cutting, tinting, and bleaching. Subjects applicable to cosmetology are also covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology exam and a successful career as a cosmetologist. This is the first of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 055BF Cosmetology - Level 2 11 Units**

**Prerequisite(s):** COSM 055AF with a grade of C or better

**Advisory:** Must be 17 years of age when applying for State Board Exam

135 hours lecture and 207 hours lab per term. This course is designed to meet the needs of the Level 2 segment that requires basic hairstyling, manicuring, pedicuring, acrylic nails with form, nail wraps, tips, mends/repairs, facials, make-up, permanent waving, scalp treatments, hair cutting, tinting, bleaching, soft permanent wave, and sodium hydroxide chemical relaxing. Related subjects, as they are applicable to cosmetology are covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology Examination and a successful career as a cosmetologist. This is the second of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 055CF Cosmetology - Level 3 10 Units**

**Prerequisite(s):** COSM 055BF with a grade of C or better.

99 hours lecture and 243 hours lab per term. This course is designed to include hair design, manicuring and pedicuring, acrylic nails, nail repair, facials and corrective make-up, scalp and hair treatments, hair sculpture, hair color design, chemical texturizing, permanent waving, chemical relaxing and curl reformation. Related subjects, as they are applicable to cosmetology, are covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology State Exam and a successful career as a cosmetologist. This is the third of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 055DF Cosmetology - Level 4 9 Units**

**Prerequisite(s):** COSM 055CF with a grade of C or better

72 hours lecture and 288 hours lab per term. This course is designed to prepare students for advanced hair, artificial nails, facials, make-up, airbrush make-up, chemical texturing, hair sculpting, extensions, color design texture/chemical relaxing. Related subjects are covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology Exam and a successful career as a cosmetologist. This is the fourth of five consecutive segments. Pivot Point Member School (Degree Credit)

**COSM 055EF Cosmetology - Level 5 9 Units**

**Prerequisite(s):** COSM 055DF with a grade of C or better

**Advisory:** Must be 17 years of age when applying for State Board Exam.

72 hours lecture and 288 hours of lab per term. This course includes salon thermal hair curling, salon hair sculpting, permanent wave design, salon color design, salon chemical relaxing-sodium hydroxide, salon nail sculpture, and salon facials. Related subjects, as they are applicable to advanced Cosmetology salon techniques are covered in this course. This course also includes California Board of Barbering and Cosmetology mock written and performance exams. This program is designed toward preparation for the State Board Exam and a successful career as a cosmetologist. Nine (9) units are given for 320 hours of classwork completed with a C or better average. This is the fifth of five consecutive segments. Pivot Point Member School. (Degree Credit)

**COSM 060 F Instructional Techniques in Cosmetology, Barbering and Esthetician 3 Units**

**Prerequisite(s):** Valid California Cosmetology, Barbering, or Esthetician License and a minimum of three years experience as a cosmetologist, barber, or esthetician with one year completed within the previous two years.

**Advisory:** Concurrent enrollment in COSM 060LF.

36 hours lecture and 54 hours lab per term. This course is designed for licensed cosmetologist/barber/esthetician who intend to teach in the post-secondary or private sector cosmetology/barbering/esthetician schools. Students will learn teaching methodologies, professional development, and learning philosophies associated with becoming a master educator in cosmetology, barbering, or esthetics. Pivot Point terminologies, principles, concepts, practices in problem-solving are emphasized. Pivot Point Member School. \*Note: COSM 060 F and COSM 062 F include the opportunity for students to complete 600 required clock hours of laboratory observation as a student-instructor. Students will need to enroll in COSM 060LF, COSM 061LF, and COSM 062LF and immediately meet with lab instructor to arrange a weekly schedule in each level to complete the 600 clock hours and units required.

**COSM 060LF Instructional Techniques in Cosmetology, Barbering and Esthetician Laboratory 3 Units**

**Prerequisite(s):** Valid California Cosmetology, Barbering or Esthetician License and a minimum of three years experience as a cosmetologist, barber or esthetician with one year completed within the previous two years.

**Advisory:** Concurrent enrollment in COSM 060 F.

162 arranged hours lab per term. This course is designed to provide licensed cosmetologist/barber/esthetician with the opportunity to complete 600 required clock hours of lab observation as a student-instructor. Pivot Point Member School. (Degree Credit)

- COSM 061AF Pivot Point Instruction I** **3 Units**  
**Prerequisite(s):** COSM 060 F or COSM 060LF with a grade of C or better and a valid Cosmetology license.  
 36 hours lecture and 54 hours lab per term. This course is designed for Cosmetologists, Cosmetology Instructors/Instructor Trainees that need to know and teach Pivot Point techniques to obtain employment in most Community College's Cosmetology Departments and progressive salons or private schools. (Degree Credit)
- COSM 061BF Pivot Point Instruction II** **3 Units**  
**Prerequisite(s):** COSM 061AF with a grade of C or better and a valid California cosmetology or esthetician license in good standing.  
 36 hours lecture and 54 hours lab per term. This course is designed to restate the common terminology and principles of Pivot Point and differentiate terms, concepts, and principles. This course will demonstrate the formulation and application of all advanced techniques. Pivot Point Member School. (Degree Credit)
- COSM 061CF Pivot Point Instruction III** **3 Units**  
**Prerequisite(s):** COSM 061BF with a grade of C or better and a current cosmetology/esthetician license.  
 36 hours lecture and 54 hours lab per term. This course is specially designed for cosmetologists, estheticians, instructors and instructor trainees that need to know and teach Pivot Point techniques. This advanced course prepares the student to successfully complete the knowledge necessary in Pivot Point training and instructional techniques to advance a technical career in the private sector and community college instructors. Pivot Point Member School. (Degree Credit)
- COSM 061LF Intermediate Instructional Techniques in Cosmetology, Barbering and Esthetician Laboratory** **2 Units**  
**Prerequisite(s):** COSM 060LF with a grade of C or better and a valid Cosmetology, Barbering, or Esthetician License.  
**Advisory:** Concurrent enrollment in COSM 062 F.  
 108 arranged hours lab per term. This intermediate course is designed to provide licensed cosmetologist, barber, or esthetician with the opportunity to complete 600 required clock hours of lab observation as a student-instructor. Pivot Point Member School. (Degree Credit)
- COSM 062 F Advanced Instructional Techniques in Cosmetology, Barbering and Esthetician** **3 Units**  
**Prerequisite(s):** COSM 060 F with a grade of C or better and a valid Cosmetology, Barber, or Esthetician license.  
**Advisory:** Concurrent enrollment in COSM 061LF or COSM 062LF.  
 36 hours lecture and 54 hours lab per term. This course is designed to teach licensed cosmetologist, barber or esthetician advanced instructional techniques. The student instructor will learn to create advanced lesson plans, demonstrate stress management skills, and motivational skills, identify instructional aids, understand the importance of administrative tasks, and analyze and employ advanced instructional techniques. Pivot Point Member School.
- COSM 062LF Advanced Instructional Techniques in Cosmetology, Barbering, and Esthetician Laboratory** **3 Units**  
**Prerequisite(s):** COSM 060LF with a grade of C or better and a valid Cosmetology, Barbering or Esthetician License.  
**Advisory:** Concurrent enrollment in COSM 062 F.  
 162 arranged hours lab per term. This advanced course is designed to provide licensed cosmetologists, barbers and estheticians with the opportunity to complete 600 required clock hours of lab observation as a student-instructor. Pivot Point Member School. (Degree Credit)
- COSM 080 F Barbering: Cosmetology Crossover to Barbering** **7.5 Units**  
**Prerequisite(s):** COSM 055EF or Pass in completion of 1600 hours of Cosmetology in theory hours and practical operations with proof of training/certificate at an accredited California community college/post-secondary school approved by the California Board of Barbering and Cosmetology, or a valid California Cosmetology License issued from the California Department of Consumer Affairs.  
**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license exam.  
 100 hours lecture and 112 hours lab per term. This course provides the additional hours in shaving preparation and performance required to qualify for the examination for a license as a barber to practice barbering.
- COSM 081 F Barbering: Level 1** **9.5 Units**  
**Prerequisite(s):** 10th grade education or equivalent.  
**Advisory:** Must be 17 years of age when applying for the California Board of Barbering and Cosmetology barbering license examination.  
 108 hours lecture and 212 hours lab per term. This is the first of five consecutive segments. This course includes basic shaving, hair styling, facials, permanent waving, scalp treatments, hair cutting, tinting, and bleaching. Subjects applicable to b barbering are also covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.
- COSM 082 F Barbering: Level 2** **9.5 Units**  
**Prerequisite(s):** COSM 081 F with a grade of C or better.  
**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.  
 108 hours lecture and 212 hours lab per term. This is the second of five consecutive segments. This course requires basic shaving, hair styling, facials, permanent waving, scalp treatments, hair cutting, tinting, bleaching, soft permanent wave, ammonium thioglycolate and sodium hydroxide chemical relaxing. Related subjects, as they are applicable to barbering are covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.
- COSM 083 F Barbering: Level 3** **9 Units**  
**Prerequisite(s):** COSM 082 F with a grade of C or better.  
**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.  
 90 hours lecture and 230 hours lab per term. This is the third of five consecutive segments. This course is designed to include shaving, hair styling, facials, permanent waving, scalp treatments, hair cutting, tinting, bleaching, soft permanent wave, ammonium thioglycolate and sodium hydroxide chemical relaxing. Related subjects, as they are applicable to barbering are covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.

**COSM 084 F Barbering: Level 4****8.5 Units****Prerequisite(s):** COSM 083 F with a grade of C or better.**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.

72 hours lecture and 248 hours lab per term. This is the fourth of five consecutive segments. This course is designed to prepare students for advanced shaving, hair styling, facials, permanent waving, hair cutting, hair coloring, chemical relaxing, and hair replacement. Related subjects are covered. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better.

**COSM 085 F Barbering: Level 5****8.5 Units****Prerequisite(s):** COSM 084 F with a grade of C or better.**Advisory:** Must be 17 years of age when applying for California Board of Barbering and Cosmetology barbering license examination.

72 hours lecture and 248 hours lab per term. This is the fifth of five consecutive segments. This course includes barbershop shaving, hair styling, hair cutting, permanent waving, hair coloring, chemical relaxing, facials, and hair replacement. Related subjects, as they are applicable to advanced Barbering shop techniques are covered in this course. This course also includes California Board of Barbering and Cosmetology mock written and performance examinations. This program is designed toward preparation for the California Board of Barbering and Cosmetology barbering license examination and a successful career as a barber. Classwork must be completed with a grade of C or better average.

## Cosmetology Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03887

The **Cosmetology Associate in Science Degree** prepares the student to pass the California Board of Barbering and Cosmetology examination. The program requires 50 units in required courses.

Code	Title	Units
<b>Required Courses (50 units):</b>		
COSM 055AF	Cosmetology - Level 1	11
COSM 055BF	Cosmetology - Level 2	11
COSM 055CF	Cosmetology - Level 3	10
COSM 055DF	Cosmetology - Level 4	9
COSM 055EF	Cosmetology - Level 5	9
<b>Total Units</b>		<b>50</b>

### Program Student Learning Outcomes

**Outcome 1:** Evaluate the difference between the articles listed in the State Board Rules and Regulation and Cosmetology Acts Manuals.**Outcome 2:** Create, organize, and produce a professional job resume.

## Cosmetology Certificate

### Requirements

PROGRAM CODE: 2C21276

The **Cosmetology Certificate** consists of a minimum of 1600 hours of training to prepare students for the California State Board of Barbering and Cosmetology license examination. The Program will lead a student into a career and/or employment in the technical field of Cosmetology with basic entry level knowledge and skills in: Professional development, salon ecology, anatomy and physiology, electricity, chemistry, salon business, trichology, design decisions, sculpture, hair design, wigs and hair additions, texture, color, nails and nail enhancements, skin care, and make-up. This certificate requires the completion of 50 units with a grade of C or better in each course required.

Code	Title	Units
<b>Required Courses (50 units):</b>		
COSM 055AF	Cosmetology - Level 1	11
COSM 055BF	Cosmetology - Level 2	11
COSM 055CF	Cosmetology - Level 3	10
COSM 055DF	Cosmetology - Level 4	9
COSM 055EF	Cosmetology - Level 5	9
<b>Total Units</b>		<b>50</b>

### Program Student Learning Outcomes

**Outcome 1:** Identify and compare the differences in Semi-shy;Permanent and Permanent hair color products.**Outcome 2:** Perform a press and curl practicing safety and sanitation procedures according to the Board of Barbering and Cosmetology.

## Cosmetology Instructor Associate in Science Degree

### Requirements

PROGRAM CODE: 2S08439

The **Cosmetology Instructor Associate in Science Degree** will prepare a student-instructor for a career and/or employment as an instructor trained to teach the technical skills necessary for work with hair, skin and nails. Preparation includes communications skills, program development, and lesson planning. This program is designed to introduce and/or expand Pivot Point principles and advanced techniques. Students completing the program will accumulate 600 clock hours as an instructor trainee. This degree requires completion of 20-22 units of which 14 units are in required courses. An additional 6-8 units must be chosen from the restricted electives list below.

Code	Title	Units
<b>Required Courses - Lecture (6 units):</b>		
COSM 060 F	Instructional Techniques in Cosmetology, Barbering and Esthetician	3
COSM 062 F	Advanced Instructional Techniques in Cosmetology, Barbering and Esthetician	3
<b>Required Courses - Lab (8 units):</b>		
COSM 060LF	Instructional Techniques in Cosmetology, Barbering and Esthetician Laboratory	3
COSM 061LF	Intermediate Instructional Techniques in Cosmetology, Barbering and Esthetician Laboratory	2

COSM 062LF	Advanced Instructional Techniques in Cosmetology, Barbering, and Esthetician Laboratory	3
<b>Restricted Electives (6-8 units):</b>		<b>6-8</b>
BIOL 100 F	Principles of Biology	4
BUS 112 F	Public Speaking for Business	4
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
CHEM 100 F	Chemistry for Daily Life	4
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
CIS 104 F	Presentation Graphics	3
COMM 100 F	Public Speaking	3
COMM 105 F	Interpersonal Communication	3
COSM 061AF	Pivot Point Instruction I	3
COSM 061BF	Pivot Point Instruction II	3
COSM 061CF	Pivot Point Instruction III	3
MKT 208 F	Principles of Selling	3
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
PSY 145 F	Child Psychology	3
PSY 251 F	Social Psychology	3
or PSY 251HF	Honors Social Psychology	
THEA 172 F	Stage Makeup (formerly THEA 147AF)	3
<b>Total Units</b>		<b>20-22</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate Pivot Point instructional methodologies that prepare students for licensure as cosmetologists, estheticians, or barbers.

**Outcome 2:** Demonstrate the ability to develop effective lesson plans, deliver instruction, and evaluate students in a community college vocational program in cosmetology, esthetics, or barbering.

## Esthetician Certificate

### Requirements

**PROGRAM CODE:** 2C16658A

The **Esthetician Certificate** is designed to prepare students in a career in technical education in skin care. Students will learn professional techniques in plain facials, chemical facials, electrical facials, make up applications, extractions, and hair removal techniques. This certificate requires a total of 22 units. A grade of C or better is required in each course taken. At least one half of the units completed must be taken at Fullerton College.

Code	Title	Units
<b>Required Courses (22 units):</b>		
COSM 041 F	Esthetician: Level 1	11
COSM 042 F	Esthetician: Level 2	11
<b>Total Units</b>		<b>22</b>

## Program Student Learning Outcomes

**Outcome 1:** Practice safety and sanitation, become knowledgeable of plain facials, chemical facials and electrical facials and demonstrate product knowledge.

**Outcome 2:** Perform client consultations, identify the basic layers of the skin and basic skin diseases and disorders and become familiar with the morphology of the hair.

## Counseling

**Division:** Counseling

### Faculty

Yolanda Aguirre  
 Olivia Barajas (CTE Counselor)  
 Porsha Boyd  
 Jennifer Combs  
 Elias Dominguez  
 Nadia Gabaldon  
 Robert Gamboa  
 Jessica Garcia  
 Heather Halverson  
 Jon-Michael Hattabaugh (STEM Counselor)  
 Nahrin Hinaro  
 Linda Kelly-Mandich  
 Stewart Kimura (SSSP Coordinator)  
 Elisa Latourelle (Puente Counselor)  
 Scott Lee (Articulation Coordinator)  
 Lupe Lopez Casillas  
 Lorena Marquez  
 Renee Mills  
 Manuel Montoya  
 Karyn Nguyen  
 Bryan Ouchi  
 Elsa Perez (Counseling Co-Coordinator)  
 Queen Peterson  
 Sylvia Pimentel  
 Kaylan Rasch  
 Rolando Sanabria (Outreach)  
 Citlally Santana (Counseling Co-Coordinator/Honors Counselor)  
 Deanna Smedley  
 Ana Tovar (Transfer Center Counselor/Honors Counselor)

## Degrees and Certificates

California State University General Education (CSU GE Breadth) Certificate of Achievement (p. 312)  
 Intersegmental General Education Transfer Curriculum (IGETC) Certificate of Achievement (p. 313)

## Courses

### **COUN 071 F Adaptive Computer Access 0.5-2 Units**

**Advisory:** Actively participate in the Disability Support Services (DSS) intake process with a DSS counselor

27-90 hours lecture and/or lab per term. This course is designed for students with learning, visual, physical, communicative disabilities or acquired brain injuries. Students will receive guided instruction/application in the introduction and use of computers and adaptive computer access technologies within the context of word processing. Pass/No Pass only. Open Entry/Open Exit.

### **COUN 072 F Learning Assessment 0.5 Units**

**Advisory:** Eligibility for services from Disability Support Services

9 hours lecture per term. This course is an individualized intensive diagnostic learning assessment for students referred to Disability Support Services. Emphasis is placed on determining the learning strengths and weaknesses of these students. Through the assessment process, students will develop learning strategies, study skills and educational goals to help them improve basic skills, educational planning, and academic performance. A student educational contract (SEC) outlining long-term goals/short-term objectives for identified eligible students with learning disabilities will be developed. This is an open entry/open exit course with arranged hours. Pass/No Pass only. Open Entry/Open Exit

### **COUN 075 F Adaptive Computer Access - Learning Strategies 0.5-2 Units**

**Advisory:** Actively participate in the Disability Support Services (DSS) intake process with a DSS counselor

27-90 hours lecture and/or lab per term. This course is designed to help all students with disabilities identify their educational weaknesses and develop strategies to overcome and/or mitigate their limitations and weaknesses. Students will receive computer-assisted instruction to improve learning strategies, problem solving and cognitive skills and proficiency in basic skills areas. Pass/No Pass only. Open Entry/Open Exit.

### **COUN 100 F Orientation for College Success 1 Unit**

18 hours lecture per term. This course is recommended for all incoming college freshman and satisfies the California Community Colleges matriculation requirements of assessment, orientation and counseling. This course is designed to familiarize students with college and contains an introduction to the principles of student development theory, student conduct, academic procedures, college policies, goal setting, educational and career planning, and college and student support services. Students will learn academic options in higher education and develop a tentative educational plan to achieve personal and academic goals. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units)

### **COUN 101 F The College Experience 2 Units**

36 hours lecture per term. This course will facilitate an understanding of the issues involved in having a successful college experience. The emphasis includes four major components of study: self-exploration, development of academic and survival skills, awareness of higher education, and transfer exploration and vocational options. Topics will include: student development theory, purpose for attending college, maintaining health, development of positive self-esteem, strategies for living a balanced life, and acquisition of academic and survival skills. Students will develop knowledge of college resources, policies and procedures. (Degree Credit) (CSU)

### **COUN 110 F Teaching As A Career 3 Units**

54 hours lecture per term. This course provides an introduction to the field of education and the teaching profession. Students will develop personal knowledge and understanding of the competing purpose and values of schools in society, the nature of teaching and the teaching profession, the impact of local, state, and federal government policies on schools, and contemporary educational values. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units)

### **COUN 135 F Introduction to Leadership Development 3 Units**

54 hours lecture per term. This course is designed to provide emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills for application in multiple roles throughout their lifetime. Students will learn the role that communication, motivation, delegation, self-assessment, planning, time management, stress management, evaluation and governance play in developing successful leaders, working relationships, and organizations. Focus will include parliamentary procedure, program development, stress reduction, and time management. (Degree Credit) (CSU) AA GE, CSU GE

### **COUN 140 F Educational Planning 0.5 Units**

9 hours lecture per term. This course includes: an orientation to college life, responsibilities, requirements, and regulations; an overview of the assessment process; certificates, occupational degrees, and transfer degrees; the transfer process; career guidance for selection of a major plan of study. Students taking this course will receive an overview of graduation requirements, transfer requirements, campus policies, student services, and career planning. Strongly recommended for first-time students with declared majors or enrollment in specific programs. Course sections may be designated for specific majors or programs. Pass/No Pass only. (Degree Credit) (CSU)

### **COUN 141 F Career Exploration 1 Unit**

18 hours lecture per term. This course is designed to introduce students to a career decision-making process which includes both evaluation of the self and exploration of the world of work. Self-evaluation activities include identification of personality/temperament, interests, skills, goals and values. Career research activities are utilized to examine the world at work. The focus of the course is on self-description in relation to the choice of occupation and career. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

### **COUN 143 F Creative Job Search 1 Unit**

18 hours lecture per term. This course will cover the basic practical aspects of conducting a successful job search. The focus will be on application, cover letter, resume, and interview as well as labor market research. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

### **COUN 144 F Career Motivation and Self Confidence 1 Unit**

18 hours lecture per term. This course is designed to help students identify individual differences, examine personal characteristics and behavior, and evaluate self-concept. Students will interpret information and apply knowledge of self as related to career demands and opportunities with increased motivation and self-confidence. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**COUN 148 F Human Potential****1 Unit**

18 hours lecture per term. This course will help students to understand and enhance their self-concept through an exploration of how that self-concept directs behavior patterns. This course will also enable students to examine and assess their strengths and potential, values and decision-making skills in order to develop an improved self-concept, and improve communication and listening skills. By becoming aware of their individual potential, students can plan and achieve their educational goals. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**COUN 151 F Career and College Success (formerly Career/Life Planning)****3 Units**

54 hours lecture per term. This course is designed to teach strategies for success to promote academic and lifelong learning through the integration of career and academic planning. Topics include intensive career investigation, assessment of interest, personality, skills, values, and other personal qualities that coincide with educational and career success; application of career and lifespan development theory; psychological and social issues that impact career and life choices; decision making; time management; goal setting; learning and life management strategies; job search and career building techniques. This course emphasizes empowering students to take charge of their academic, career, and personal decisions through the integration of career exploration and individual educational planning. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units) AA GE, CSU GE

**COUN 152 F Diversity in the World of Work****3 Units**

54 hours lecture per term. This course explores the influence of factors such as gender, age, abilities, ethnicity, culture, and socioeconomic status on past, present and future working conditions, career development, and labor market trends in the United States. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) AA GE

**COUN 160 F Academic Success (formerly COUN 060 F)****2 Units**

36 hours lecture per term. This course is designed to promote student success. Students taking this course will receive an overview of graduation requirements, certificates, transfer requirements, campus policies, student services, and career planning and college culture. Focus will be on strategies needed for academic success and the development of a Comprehensive Educational Plan. Students will develop skills in time management, decision making, study techniques and learning strategies. Students will increase their awareness of community resources, current college policies and procedures and cultural diversity. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units)

**COUN 161 F Assertion Skills/Communication****2 Units**

36 hours lecture per term. This course introduces students to the concept of assertive skills and learning techniques and strategies for implementing assertive behavior. This course assists students in developing effective critical thinking skills as they explore the relationship between inner dialogue and outward behavior and analyze and assess conflicts encountered in everyday life. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**COUN 163 F Personal Growth and Life Success****3 Units**

54 hours lecture per term. This course will emphasize college student strategies through critical analysis of the academic, career, and interpersonal factors that influence student success. Students will examine the perception of the importance of a college education as it pertains to career trends, core values, and access to educational opportunities. Multidisciplinary examination will be applied to concepts of diversity, identity, life transitions, and individual adjustment; these concepts will then be related to choice theory and personal responsibility in educational success. Experiential and theoretical approaches will be applied to understanding the self, peer and campus culture, goal clarification and educational pathways. The course integrates the intellectual, physiological, social, and psychological aspects of being a college student through the comprehensive examination of personality development and life determinants. The critical analysis and synthesis of these aspects facilitates educational planning for transfer and career options. Students will be introduced to lifestyle choices and decision-making skills that validate their academic and career success. (Degree Credit) (CSU) (UC Credit Limitation: COUN 100 F, COUN 110 F, COUN 151 F, COUN 160 F, and COUN 163 F combined maximum credit, 3 units) AA GE, CSU GE

**COUN 193 F Financial Life Skills (formerly COUN 093 F)****2 Units**

36 hours lecture per term. This course is designed to assist students in understanding basic strategies for managing college and personal finances. Students will increase their knowledge in accessing available forms of financial assistance and maximizing finances for timely degree completion and/or transfer. Students will develop a basic understanding of adult-related tasks such as personal budget management, calculating cost of education, how to deal with financial difficulties, maximizing their financial aid benefits and other financial resources, understanding repayment options and the consequences related to mismanaging funds. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**COUN 199 F Counseling/Guidance: Independent Study****0.5-2 Units**

9-36 hours lecture per term. This course is designed for students who wish to explore in depth various guidance-related topics. Unit credit may range from one-half to two units in any given semester. Consult class schedule for list of topics and to verify credit for the particular term. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC review required.)

## California State University General Education (CSU GE Breadth) Certificate of Achievement

### Requirements

PROGRAM CODE: 2C36510

A certificate of achievement will be granted to students who complete a minimum of 39 units from areas A through E of the CSU general education requirements. CSU GE requirements are designed to be taken within a major area of concentration and elective courses in preparation for transfer to the California State University.\*

To receive this Certificate of Achievement, students should:

- Review the CSU GE Breadth (p. 502) pattern sheet in this catalog or available from the Counseling Center,
- Consult with a counselor to ensure students understand and are following all requirements.



- Receive a grade of C- or better in classes taken in Areas A1, A2, A3 and B4.
- Verify through their counselor and [www.assist.org](http://www.assist.org) (<http://www.assist.org>) that classes taken are approved for CSU GE the semester they are taken.
- Complete at least 3 units in residency at Fullerton College.

**Note: Students who receive the CSU GE Certificate of Achievement do not need to request separate GE Certification; it will automatically be granted and indicated on their transcript if all requirements are met. Note: Completion of the CSU GE Breadth requirements alone is not enough to make students eligible for admission to a CSU. \*Following the CSU GE pattern may not always be the best option for students, especially those transferring to highly impacted majors in the CSU system. Please consult with a counselor for details on completing all transfer admission requirements or using course work from other institutions.**

## Program Student Learning Outcomes

**Outcome 1: Area A: English Language Communication and Critical Thinking.** Create written and spoken works that demonstrate effective communication and critical thinking skills.

**Outcome 2: Area B: Scientific Inquiry and Quantitative Reasoning.** Analyze and apply mathematical concepts and scientific methods to interpret and to evaluate data in order to effectively problem-solve issues in a variety of contexts.

**Outcome 3: Area C: Arts and Humanities.** Demonstrate a critical understanding, appreciation and expression of artistic, philosophical, and cultural sensibilities in historical and contemporary contexts.

**Outcome 4: Area D: Social Sciences.** Identify, analyze, and communicate an understanding of self and society through systematic investigation of social behavior, institutions, and culture.

**Outcome 5: Area E: Lifelong Learning and Self-Development.** Demonstrate meaningful self-evaluation related to increasing the student's lifelong personal well-being.

## Intersegmental General Education Transfer Curriculum (IGETC) Certificate of Achievement

### Requirements

PROGRAM CODE: 2C36483

A certificate of achievement will be granted to students who complete a minimum of 37 units from areas 1 through 6 of the Intersegmental General Education Transfer Curriculum (IGETC) requirements. IGETC requirements are designed to be taken within a major area of concentration and elective courses in preparation for transfer to the University of California (UC) or California State University (CSU) systems.\*

To receive this Certificate of Achievement, students should:

- Review the IGETC (<https://catalog.nocccd.edu/fullerton-college/general-education-breadth-requirements-college-university/intersegmental-general-education-transfer-curriculum/>) pattern sheet in this catalog or available from the Counseling Center.

- Consult with a counselor to insure students understand and are following all requirements.
- Receive a grade of C or better is required in ALL coursework used for IGETC certification.
- Verify through their counselor and [www.assist.org](http://www.assist.org) (<http://www.assist.org>) that classes taken are approved for IGETC the semester they are taken.
- Complete at least 3 units in residency at Fullerton College.

**Note: Students who receive the IGETC Certificate of Achievement do not need to request separate GE Certification; it will automatically be granted and indicated on their transcript if all requirements are met. Note: Completion of the IGETC requirements alone is not enough to make students eligible for admission to a UC or CSU. \*Following the IGETC pattern may not always be the best option for students, especially those transferring to highly impacted majors in the UC or CSU system. Please consult with a counselor for details on completing all transfer admission requirements or using course work from other institutions.**

## Program Student Learning Outcomes

**Outcome 1: Area 1: English Communication.** Create written and spoken works that demonstrate effective communication and critical thinking skills.

**Outcome 2: Area 2: Mathematical Concepts and Quantitative Reasoning.** Analyze and solve theoretical and applied mathematical problems using the logic and symbol system of mathematics.

**Outcome 3: Area 4: Social and Behavioral Sciences.** Demonstrate a critical understanding, appreciation and expression of artistic, philosophical, and cultural sensibilities in historical and contemporary contexts.

**Outcome 4: Area 4: Social and Behavioral Sciences.** Identify, analyze, and communicate an understanding of self and society through systematic investigation of social behavior, institutions, and culture.

**Outcome 5: Area 5: Physical and Biological Sciences.** Examine and evaluate issues related to the physical and biological sciences from an evidence-based perspective and use in applied contexts.

## Dance

Division: Physical Education

### Faculty

Melanie Rosa  
Kathleen Whalen

### Degrees and Certificates

- Dance Associate in Arts Degree (p. 316)
- Dance Teaching Certificate (p. 316)

### Courses

#### DANC 100 F Dance Appreciation

**3 Units**

54 hours lecture per term. This course provides exposure to historical and contemporary dance forms and their religious, social, cultural and artistic qualities. The course will include the viewing of video documentation, discussion, research and student presentations. This course is recommended for non-majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

- DANC 101 F Introduction to Dance World Cultures** **1 Unit**  
54 hours lab per term. This course will introduce social, folk, and square dancing from the different cultures of the world. Dance cultures that will be studied will include the dances of: Asia, Africa, Europe, Latin America, Middle East, Mexico, Native American, Polynesia, and Spain. This class will include research and study of the backgrounds of dances and cultures, and will provide opportunities for development of acceptable performance as preparation for more advanced technique courses. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 102 F Conditioning for Dance** **2 Units**  
18 hours lecture and 54 hours lab per term. This course introduces various types of stretching, strengthening, and body alignment exercises for dance. This course combines techniques and skills from various body therapy programs (e.g., yoga, Pilates, and Gyrokinesis) to enhance flexibility and strength. (CSU) (UC) (Degree Credit) CSU GE
- DANC 103 F Dance Technique I** **1 Unit**  
54 hours lab per term. This course focuses on basic movement techniques to prepare the body for dance. This class also meets the needs of students who are interested in achieving fitness and contouring of the body by the use of dance technique. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- DANC 104 F Dance Technique II** **1 Unit**  
**Prerequisite(s):** DANC 103 F with a grade of C or better or instructor approval.  
54 hours lab per term. This course provides intermediate movement techniques. This course also meets the needs of students who are interested in achieving fitness and contouring of the body by the use of dance technique. (Degree Credit) (CSU) (UC Credit Limitation) CSU GE
- DANC 110 F Ballet Folklorico** **1 Unit**  
36 hours lab per term. This course is designed to give a general knowledge of the regional dance styles of Mexico and their cultural aspects. Students will be expected to learn various dance steps. (CSU) (UC) (Degree Credit)
- DANC 111 F Jazz I** **1 Unit**  
54 hours lab per term. This course is designed for students to learn basic skills of Jazz Dance with emphasis on body alignment, strength and coordination. AA Dance; Liberal Arts; satisfies PE requirement for General Education. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 112 F Jazz II** **2 Units**  
**Prerequisite(s):** DANC 111 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. In this course, students will learn intermediate skills of jazz dance with emphasis on body alignment, strength and coordination. This course includes more advanced work in turns, isolations, and combinations and work with more complex rhythmic elements. (CSU) (UC) (Degree Credit)
- DANC 113 F Tap Dance I** **1 Unit**  
54 hours lab per term. This course is designed to introduce basic tap dance techniques and beginning tap dances and provides an opportunity for the enrolled student to develop increased coordination and rhythm. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- DANC 114 F Tap Dance II** **1 Unit**  
**Prerequisite(s):** DANC 113 F with a grade of C or better  
54 hours lab per term. This course provides opportunity for further development of tap dance skills at an intermediate level. Includes some provision for student composition. (CSU) (UC) (Degree Credit)
- DANC 115 F Hip Hop Dance I** **1 Unit**  
54 hours lab per term. This course provides the opportunity for students to learn various forms of beginning Hip Hop dancing including Popping, Locking and Funk style. Students will learn the basic history of hip hop culture. (CSU) (UC) (Degree Credit) CSU GE
- DANC 116 F Social Dance** **1 Unit**  
54 hours lab per term. This course provides the enrolled student exposure to various dance forms. This course is designed for both the non-dancer and the student with dance experience. Examples of dance forms that may be included are: Swing, Salsa, Mambo, Cha-cha, Tango, Waltz, Country Western, and Fox Trot. Also included are historical roots of each form and opportunity for student choreography. (CSU) (UC) (Degree Credit) CSU GE
- DANC 119 F Dance for Theatre** **1 Unit**  
54 hours lab per term. This course provides opportunities to explore various dance styles: ballet, jazz, modern and tap for musical theatre productions. Exposure to choreography for musical theatre and student choreography. (CSU) (UC) (Degree Credit) CSU GE
- DANC 120 F Dance History** **3 Units**  
54 hours lecture per term. In this course, students will study dance forms from primitive to present day with lecture, film, and class discussion. Students will also compare various dance techniques, theories, and personalities who have contributed to the art of dance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- DANC 121 F Classical Dance Fundamentals** **1 Unit**  
54 hours lab per term. This course is designed for the student who has little or no training in classical dance. This course provides instruction in application of the use of the fundamentals of applied biomechanics to achieve classical dance positions and movements. It is designed to instruct the student in the use of the fundamentals of physical movement to achieve maximum physical performance for dance and to assist in preventing injury and creating longevity for the dancer. This course provides instruction in applied biomechanics at the ballet barre, for classical ballet positions, and in use of short sequences of dance combinations and basic turns and leaps for classical dance. (CSU) (UC) (Degree Credit) CSU GE
- DANC 122 F Middle Eastern Dance** **1 Unit**  
54 hours lab per term. This course is designed to explore various types of dances that are common in the Middle East (Belly dancing and dabke). Students will acquire movement unique to Middle Eastern dance. (CSU) (UC Credit Limitation) (Degree Credit)
- DANC 130 F Afro-Caribbean Dance** **1 Unit**  
54 hours lab per term. This course provides instruction in the dance styles and rhythms of Afro-Caribbean cultures. Different regions of the Caribbean will be explored. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- DANC 132 F Flamenco Dance I** **1 Unit**  
54 hours lab per term. In this course, students will study basic Flamenco Dance technique and learn movement combinations. This class provides students with the opportunity to develop coordination, rhythm, and performance skills. Some history of Flamenco will be included. (CSU) (UC Credit Limitation) (Degree Credit)
- DANC 140 F Introduction to Ballet** **2 Units**  
18 hours lecture and 54 hours lab per term. This course is designed to instruct the beginning ballet student in the fundamentals of ballet technique and terminology. Students will learn basic skills at the barre and center floor with an emphasis on proper alignment. The student will also learn the basic history of ballet as a performing art and will view examples of ballet. (CSU) (UC) (Degree Credit) AA GE, CSU GE

- DANC 141 F Ballet I - Beginning Ballet** 2 Units  
*Prerequisite(s):* DANC 140 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. In this course students will elaborate on basic ballet skills, adding new vocabulary and movements. Emphasis will be on developing alignment, strength, flexibility, balance and coordination. Students will learn about the historical context of the art form and its roots in Western culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 142 F Ballet II - Advanced Beginning Ballet** 2 Units  
*Prerequisite(s):* DANC 141 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. In this course students will learn advanced beginning ballet technique with an emphasis on developing performance skills, self-expression and musicality. Students will practice increasingly complex connecting combinations that challenge body stability and control. Students will learn about the evolution of ballet in the twentieth century and its influence on other forms of dance. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 143 F Ballet III - Intermediate Ballet** 2 Units  
*Prerequisite(s):* DANC 142 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course will challenge the student with intermediate level ballet steps and sequences. Emphasis will be on advancing technique for jumps and turns, performance skills, and self-expression. Students will use intermediate level steps and skills to compose short ballet sequences with attention on aesthetic choices. Students will explore different styles of contemporary ballet and significant contemporary ballet choreographers. (CSU) (UC) (Degree Credit) CSU GE
- DANC 150 F Commercial Dance** 1 Unit  
 54 hours lab per term. This course will focus on contemporary dance styles made popular from the television, film and video industry. Students will learn and create stylized commercial dance movement combinations using a variety of popular music. (CSU) (UC Credit Limitation) (Degree Credit)
- DANC 151 F Latin Jazz** 1 Unit  
 54 hours lab per term. In this course, students will study and learn basic skills of Latin Jazz dance and styles inherent in Jazz and Afro-Caribbean dance and Latin Popular rhythms such as Cha Cha, Mambo, Salsa, Merengue, Bolero, Cumbia, and Corridos. Students will learn Latin Jazz combinations. Cost of dance concert admission will not exceed \$40. (CSU) (UC) (Degree Credit)
- DANC 160 F Introduction to Modern Dance** 2 Units  
 18 hours lecture and 54 hours lab per term. This course is an introduction to modern dance. Students will learn the basic vocabulary and movements of modern dance with an emphasis on body and spatial awareness, alignment, locomotor skills, and conditioning the body. Students will also learn about the history of modern dance as a performing art and will view examples of modern dance in class. (CSU) (UC) AA GE, CSU GE
- DANC 161 F Beginning Modern Dance (formerly DANC 107 F)** 2 Units  
*Prerequisite(s):* DANC 160 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course is designed to build on the basics of modern dance adding new vocabulary and movements. Emphasis will be on alignment, strength, flexibility, balance and coordination. Students will learn about the historical context of the art form and its roots in Western culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 162 F Advanced Beginning Modern Dance (formerly DANC 108 F)** 2 Units  
*Prerequisite(s):* DANC 161 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course expands upon the foundations of modern dance technique with an emphasis on performance skills, self-expression, and musicality. Students will practice increasingly complex connecting combinations challenging kinesthetic abilities. Students will learn about the evolution of modern dance in the twentieth century and its roots in United States culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 163 F Intermediate Modern Dance** 2 Units  
*Prerequisite(s):* DANC 162 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course will present intermediate level modern dance technique, challenging skills with increasingly complex movement patterns and physicality. Emphasis will be on developing creative skills and generating interpretive dance phrases. Students will learn about contemporary modern dance choreographers. (CSU) (UC) (Degree Credit) AA GE, CSU GE
- DANC 200 F Dance Appreciation - A Classical Ballet Retrospective** 3 Units  
 54 hours lecture per term. This course is designed to expose the student to the performance of classical ballet by major dance companies from around the world and historical artists in performance. This course examines the thematic material of individual ballets, the era from which they came, the history of the choreographers, and the influences of society on ballet. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- DANC 202 F Dance Composition/Choreography** 3 Units  
 36 hours lecture and 54 hours lab per term. This course provides theory and practice of the basic elements of dance composition and also emphasizes problem-solving skills and the craft and creation of movement studies and full-length dances for the individual and/or group. (CSU) (UC) (Degree Credit) CSU GE
- DANC 203 F Dance Production** 2 Units  
*Prerequisite(s):* Previous dance experience.  
 108 hours lab per term. This course provides opportunity for creative dance expression. The emphasis of the class is on advanced dance techniques and choreography. Opportunities for public performance are available. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)
- DANC 204 F Dance Rehearsal and Performance** 3 Units  
*Prerequisite(s):* Any previous dance class or instructor approval.  
 This course provides an opportunity for a student to stage his own choreography or to participate as a dancer in original choreography by a student, faculty or guest artist. This course is a practical experience in choreography, performance and directing. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- DANC 205 F Dance Ensemble** 3 Units  
*Prerequisite(s):* Audition.  
 36 hours lecture and 54 hours lab per term. This course is a selective dance performing group utilizing advanced resource and movement materials. This class is designed to give the advanced dancer an opportunity for continued performance and growth in dance technique and group repertoire. Students participate in multiple performances on campus and/or venues within the area. This course includes preparing for an audition, designing a resume, and setting goals for future performance opportunities in dance. Field trips may be required. Course may be taken three times for credit. (CSU) (UC) (Degree Credit) CSU GE

**DANC 210 F Multicultural Dance in the U.S. Today** **3 Units**

54 hours lecture per term. This course covers the social and theatrical dances of various countries will be viewed and examined in terms of cultural influences, historical and social origins, and the functions they fulfill for individual artists, their cultures, and society in general. African American, Asian, Hispanic, European and Native American dances, choreographers, and dancers will be studied. The class work will include readings, discussions, group projects, and analysis of dance performances on video and live theater. Attendance at a selected group of performances is required. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

**DANC 214 F Dance Repertory** **2 Units**

108 hours lab per term. This course provides the opportunity to rehearse and perform works choreographed by faculty and/or artist-in-residence. It is an opportunity to experience professional working conditions and requirements. All phases of the dance concert process from audition to rehearsal to backstage preparation will be covered. (CSU) (UC) (Degree Credit)

## Dance Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03851

The **Dance Associate in Arts Degree** is designed to provide students with a foundational dance education emphasizing dance technique and performance complimented by integrated studies in choreography, dance production, repertory, dance appreciation and conditioning that will prepare them to transfer as dance majors for an advanced degree or to teach, choreograph, and perform at various community and private venues. Additionally the dance training will contribute to the student's development of management skills, collaboration strategies and aesthetics. This degree requires a total of 28-30 units.

Code	Title	Units
<b>Required Courses (25-27 units):</b>		
DANC 100 F	Dance Appreciation	3
or DANC 120 F	Dance History	
or DANC 210 F	Multicultural Dance in the U.S. Today	
DANC 102 F	Conditioning for Dance	2
DANC 112 F	Jazz II	2
DANC 141 F	Ballet I - Beginning Ballet	2
DANC 142 F	Ballet II - Advanced Beginning Ballet	2
DANC 143 F	Ballet III - Intermediate Ballet	2
DANC 162 F	Advanced Beginning Modern Dance (formerly DANC 108 F)	2
or DANC 163 F	Intermediate Modern Dance	
DANC 200 F	Dance Appreciation - A Classical Ballet Retrospective	3
DANC 202 F	Dance Composition/Choreography	3
DANC 203 F	Dance Production	2-3
or DANC 204 F	Dance Rehearsal and Performance	
DANC 214 F	Dance Repertory	2-3
or DANC 205 F	Dance Ensemble	
<b>Restricted Electives - Select from the following (3 units):</b>		
DANC 113 F	Tap Dance I	1

DANC 114 F	Tap Dance II	1
DANC 122 F	Middle Eastern Dance	1
DANC 130 F	Afro-Caribbean Dance	1
DANC 150 F	Commercial Dance	1

**Total Units** **28-30**

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate a foundational knowledge of ballet, modern and jazz techniques from beginning to intermediate level.

**Outcome 2:** Demonstrate acquired knowledge of dance techniques enabling them to perform various styles of dance.

**Outcome 3:** Assess and criticize dance from a historical and stylistic perspective.

## Dance Teaching Certificate

### Requirements

PROGRAM CODE: 2C00077

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **Dance Teaching Certificate** is designed to prepare the student to teach creative movement at a variety of locations, such as community centers and private dance studios. This certificate requires a total of 17-19 units. A minimum grade of C is required in each course taken.

Code	Title	Units
<b>Required Courses (14 units):</b>		
DANC 103 F	Dance Technique I	1
DANC 111 F	Jazz I	1
DANC 112 F	Jazz II	2
DANC 113 F	Tap Dance I	1
DANC 115 F	Hip Hop Dance I	1
DANC 140 F	Introduction to Ballet	2
DANC 141 F	Ballet I - Beginning Ballet	2
DANC 160 F	Introduction to Modern Dance	2
DANC 161 F	Beginning Modern Dance (formerly DANC 107 F)	2
<b>Restricted Electives (3-5 units):</b>		<b>3-5</b>
DANC 100 F	Dance Appreciation	3
or DANC 120 F	Dance History	
DANC 116 F	Social Dance	1
DANC 119 F	Dance for Theatre	1
DANC 122 F	Middle Eastern Dance	1
or DANC 130 F	Afro-Caribbean Dance	
DANC 132 F	Flamenco Dance I	1
DANC 200 F	Dance Appreciation - A Classical Ballet Retrospective	3
or DANC 210 F	Multicultural Dance in the U.S. Today	
<b>Total Units</b>		<b>17-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate the ability to teach creative movement in the style of ballet, modern, jazz as well as ethnic dance forms.

**Outcome 2:** Demonstrate acquired dance training and practical skills to qualify for work in community centers, private dance studios, and other venues.

**Outcome 3:** Create choreographed beginning dance sequences in the style of ballet, modern and jazz dance.

## Earth Sciences

Division: Natural Sciences

### Faculty

Lilliana Barabas  
Sean Chamberlin  
Roman De Jesus  
Marc Willis

### Degrees and Certificates

- Astronomy Associate in Arts Degree (p. 319)
- Earth Science Associate in Science Degree (p. 320)

### Courses

**ESC 100 F Physical Geology** **3 Units**  
54 hours lecture per term. This introductory course explores the physical composition of the earth and those processes that modify its surface. Topics include rocks and minerals, plate tectonics, earthquakes, volcanoes, landslides, flooding, groundwater, beach processes, and earth resources. Contemporary environmental changes such as global warming and resource acquisition problems will also be discussed. Concurrent enrollment in ESC 100LF is recommended. Field trips may be taken. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 100)

**ESC 100LF Physical Geology Lab** **1 Unit**  
**Corequisite(s):** ESC 100 F with a grade of C or better.  
54 hours lab per term. This course covers identification of minerals and rocks, interpretation of topographic maps and geologic folios, study of landforms and rock structures and field studies. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOL 100L)

**ESC 101 F Earth Science Survey** **3 Units**  
54 hours lecture per term. This course explores the fields of geology, oceanography, meteorology, and astronomy. Topics include earthquake and volcanic processes, global current patterns, beach formation, hurricane and tornado development, and star and planetary evolution. Special emphasis is placed on contemporary human-induced environmental changes such as global warming and resource acquisition. Class discussions will also focus on the interaction between science and society. Laboratory not required but recommended. Field trips may be required outside of regularly-scheduled class times. Laboratory not required but recommended. (Degree Credit) (CSU) (UC Credit Limitation: no credit for ESC 101 F if taken after college level class in astronomy, meteorology, geology or oceanography) AA GE, CSU GE, IGETC (C-ID: GEOL 120)

**ESC 101LF Earth Science Survey Lab** **1 Unit**  
**Corequisite(s):** ESC 101 F with a grade of C or better.  
54 hours lab per term. This course enhances topics covered in the ESC 101 F. This course includes exercises in identifying minerals and rocks, reading topographic maps, analyzing earthquakes, interpreting coastal processes, forecasting weather, and recognizing the stars and planets. Field trips may be taken. (Degree Credit) (CSU) (UC Credit Limitation; no credit for ESC 101LF if taken after college level class in astronomy, meteorology, geology or oceanography). CSU GE, IGETC (C-ID: GEOL 120L)

**ESC 102 F Survey of Natural Disasters** **3 Units**  
54 hours lecture per term. This course explores those natural disasters that affect human activities. Topics include earthquakes, floods, landslides, volcanoes, hurricanes, tornados and asteroid/meteor impacts. The consequences of pollution and population growth will also be explored. Hypothetical and case histories of natural disasters will also be studied. Class discussions will focus on aspects of regional planning, environmental laws and the interaction between science and society. Field trips are optional. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE

**ESC 103 F Historical Geology** **4 Units**  
54 hours lecture and 54 hours lab per term. This course covers the Earth's origin, geological development through time and history of its life are presented using the plate tectonic theory. The importance of environment to evolution and extinction of life forms are stressed. Study and classification of major rock and fossil groups, interpretation of geologic and topographic maps, and application of rock and fossil interpretations to geologic problems are included. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 111)

**ESC 104 F Geology of National Parks and Monuments** **3 Units**  
54 hours lecture per term. This course is a description of the broad geologic features of North America with special emphasis on the U.S. National Parks and Monuments. Photographic slides and rock samples will be used to illustrate the geologic significance of the parks and monuments. Utilizing the plate tectonic theory, a geologic history of North America will be deduced from the descriptive geology. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) AA GE, CSU GE

**ESC 105 F Introduction to Weather and Climate** **3 Units**  
54 hours lecture per term. This course examines the physical properties of the atmosphere including solar heating and cooling, atmospheric circulation, weather systems, extreme weather, atmospheric optics, climate change, and weather radar, maps and forecasting. The effects of human activities on Earth's climate will be emphasized. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 130)

**ESC 105LF Introduction to Weather and Climate Laboratory** **1 Unit**  
**Corequisite(s):** ESC 105 F with a grade of C or better.  
9 hours lecture and 27 hours lab per term. This course offers lab studies to correspond to material covered in ESC 105 F. Fundamental concepts in meteorology and measurement techniques including selected mathematical concepts used in developing an understanding of weather and climate will be covered. Analysis of real-time weather data will be stressed. Each lab experience will be preceded by an orientation lecture/discussion period. This course may include field trips. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOG 130)

**ESC 106 F Geology of Orange County Area****2 Units**

36 hours lecture per term. This course examines the physical and historical geology of the Orange County area. The county will be analyzed for faults and folds, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips are required. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) AA GE

**ESC 107 F Earth Science for Educators****4 Units**

54 hours lecture and 54 hours lab per term. This course engages students in a study of our dynamic planet, including its astronomy, geology, oceanography, and meteorology. Topics include solar system and planetary formation, earthquake and volcanic processes, waves and beach processes, global oceanic and atmospheric circulation patterns, severe storm development, and climate change. While open to all students, this course is oriented towards preparing future science teachers. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 110 F Introduction to Climate Science****3 Units**

54 hours lecture per term. This course engages students in a study of climate science including global warming and climate change. Students will examine interactions among Earth's various climate subsystems - the hydrosphere, lithosphere, atmosphere and biosphere - and how exchanges of energy and matter between them govern Earth's climate. The interaction of humans with the climate system will be woven throughout. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116 F Astronomy****3 Units****Advisory:** MATH 020 F.

54 hours lecture per term. This course is an introduction to the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. High School Algebra and Plane Geometry or equivalents are highly desirable. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116HF Honors Astronomy****3 Units****Advisory:** MATH 020 F or math skills clearance

54 hours lecture per term. This Honors-enhanced course is an introduction of the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. As an Honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. High school algebra and plane geometry or the equivalents are highly desirable. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116LF Astronomy Lab****2 Units****Advisory:** MATH 020 F or math skills clearance and ESC 116 F.

72 hours lab per term. This course introduces the student to astronomical viewing and measurement as well as analysis of astronomical data. Students will do lab experiments to understand principles of astronomy and data analysis. They will use telescopes to make observations and gather data (or use computer images) and perform exercises relating to the moon, planets, stars, and galaxies. A field trip for dark sky observation may be arranged. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**ESC 117 F Field Astronomy****1 Unit****Advisory:** ESC 116 F and MATH 020 F or math skills clearance

18 hours lecture per term. This course is an introduction to methods of observational astronomy including naked eye, binocular and telescopic observations. Lectures will cover celestial sphere, celestial coordinates, motions of the sky, star charts and telescope optics. Students will be trained in using star charts, planispheres, planetarium software and telescopes. Overnight camping required. (Degree Credit) (CSU)

**ESC 120 F Geology of California****3 Units**

54 hours lecture per term. This course examines the physical and historical geology of California. Each of California's natural provinces will be analyzed for tectonic structures, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips may be taken. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 200)

**ESC 130 F Introduction to Oceanography****3 Units**

54 hours lecture per term. The lectures present a survey of the geological, physical, chemical, and biological principles and processes of oceanography. This course examines how these processes interact to form a variety of habitats within the marine ecosystem. An overview is provided of the physical properties of these habitats, along with the distribution and characteristics of organisms found within them. The interactions of humans with the marine environment is presented, as is an introduction to oceanographic tools and their uses. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 130HF Honors Introduction to Oceanography****3 Units**

54 hours lecture per term. This Honors-enhanced course presents a survey of the geological, physical, chemical, and biological principles and processes of oceanography. An overview is provided of the geological, physical and chemical properties of ocean ecosystems and examples are given of characteristics of organisms found within them. The role of technology and its application to studying the world ocean is woven throughout. Students will develop an understanding of the interaction of humans with the world ocean, especially in view of the critical scientific, environmental, social and political issues that emerge from ocean conservation efforts. Students are expected to critically analyze scientific and journalistic information and engage in written and oral debate to reach a deeper understanding of these issues. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 130LF Introduction to Oceanography: Field Experience****1 Unit****Corequisite(s):** ESC 130 F with a grade of C or better.

9 hours lecture and 27 hours lab per term. This course offers field studies to correspond to material covered in ESC 130 F. Each field experience will be preceded by an orientation lecture/discussion period. May include field work from boats. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**ESC 140 F Geology of California Coastal Areas****2 Units**

36 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas along California's coastline. Lectures will examine the geologic importance of coastal areas and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 141 F Geology of the Anza-Borrego Desert State Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Anza-Borrego Desert State Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 142 F Geology of Mojave Desert Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Mojave Desert area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ESC 143 F Geology of the Owens Valley and Mammoth Lakes Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Owens Valley-Mammoth Lakes area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 144 F Geology of Southern California Mountain Areas 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Transverse Ranges and Santa Ana Mountains area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 145 F Geology of the Death Valley National Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Death Valley National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ESC 146 F Geology of the Joshua Tree National Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Joshua Tree National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic hazards and the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU)

**ESC 147 F Geology of Colorado Plateau Areas 2 Units**

36 hours lecture per term. This course involves lecture and field study of geologic features and processes in selected areas of the Colorado Plateau. Lectures will explore the geologic significance of these areas and how to recognize key geologic hazards and resource potential. Areas of study may include Grand Canyon, Zion, Bryce Canyon, Capital Reef, Arches, and Canyonlands national parks. Students will be trained to use various scientific tools for conducting geologic field studies. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU)

**ESC 190 F Environmental Geology 3 Units**

54 hours lecture per term. This course explores those geologic processes that influence human activities. Topics include the geologic hazards, such as earthquakes, floods, landslides, and volcanoes; the occurrences and limitations of natural resources; and the consequences of pollution and waste disposal on the earth. Hypothetical and case histories of natural disasters will be studied. Class discussions will also focus on geologic aspects of regional planning, environmental laws, and the interaction between science and society. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 130)

**ESC 196 F Regional Field Studies in Geology 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas throughout the Southwestern United States. During a given semester, multiple sections may be offered to different study areas or for different topics. Lectures will examine the geologic importance of the area to be visited and how to recognize key geologic features in the field. Study areas include, but are not limited to, Mojave Desert, the Sierra Nevada, and coastal areas. Areas outside of California (i.e., Arizona, New Mexico) may also be selected. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 199 F Earth Science Independent Study 1-3 Units**

**Prerequisite(s):** ESC 100 F or ESC 101 F or ESC 130 F, with a grade of C or better

54-162 hours independent study per term. This course involves lab and/or field investigations of earth science phenomena under the guidance of members of the earth sciences faculty. Designed primarily for majors in earth sciences, or teachers who wish to increase their knowledge of the sciences, the course provides individual study and small group interactions. Independent research problems with staff supervision are conducted upon approval. Hours to be arranged. Field trips may be required. Outside reading and a written report required. Presentation of research at scientific conferences is encouraged. Elective credit in the sciences area. (Degree Credit) (CSU) (UC review required)

**ESC 230 F Coastal Oceanography 3 Units**

36 hours lecture and 54 hours lab per term. This course engages students in a study of the geological, physical, chemical, and biological oceanography of the coastal ocean of Southern California and the California Current Large Marine Ecosystem. (Degree Credit) (CSU)

## Astronomy Associate in Arts Degree Requirements

**PROGRAM CODE:** 2A08436

The **Astronomy Associate in Arts Degree** prepares students for further study in astronomy. This degree requires 21-22 units of which 17 units are in required courses. An additional 4-5 units must be chosen from the restricted electives listed below.

Code	Title	Units
<b>Required Courses (17 units):</b>		
ESC 116 F or ESC 116HF	Astronomy Honors Astronomy	3
ESC 116LF	Astronomy Lab	2
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
<b>Select 4-5 units from the following:</b>		
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
MATH 151 F or MATH 151HF	Calculus I (formerly MATH 150AF) Honors Calculus I (formerly MATH 150HF)	4
MATH 152 F	Calculus II (formerly MATH 150BF)	4
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
<b>Total Units</b>		<b>21-22</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore topics in astronomy.

**Outcome 2:** Explain the motion, formation, and evolution of celestial objects in the solar system and beyond.

# Earth Science Associate in Science Degree

## Requirements

PROGRAM CODE: 2S33890

This **Earth Science Associate in Science Degree** is designed to introduce the student to the multidisciplinary field of Earth Science. Students who complete this degree will be prepared for further study in Earth Science or related disciplines, for transfer to B.A./B.S. programs in Earth Science, or as preparation to teach Earth Science at a primary or secondary grade level. This degree requires a total of 21 units of which 13 units are in required courses. An additional 8 units must be chosen from the list of restricted electives.

Code	Title	Units
<b>Required Courses (13 units):</b>		
ESC 100 F	Physical Geology	3
ESC 100LF	Physical Geology Lab	1
ESC 130 F or ESC 130HF	Introduction to Oceanography Honors Introduction to Oceanography	3
ESC 130LF	Introduction to Oceanography: Field Experience	1
ESC 116 F or ESC 116HF	Astronomy Honors Astronomy	3
ESC 116LF	Astronomy Lab	2
<b>Restricted Electives - Select 8 units from the following list:</b>		
ESC 102 F	Survey of Natural Disasters	3

ESC 103 F	Historical Geology	4
ESC 104 F	Geology of National Parks and Monuments	3
ESC 105 F	Introduction to Weather and Climate	3
ESC 106 F	Geology of Orange County Area	2
ESC 120 F	Geology of California	3
ESC 190 F	Environmental Geology	3
<b>Total Units</b>		<b>21</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore topics in earth science and geology.

**Outcome 2:** Apply earth science/geology concepts to better understand current issues of environmental and/or geologic concern.

**Outcome 3:** Demonstrate concept mastery.

## Economics

Division: Social Sciences

## Faculty

Francis Mummery

## Degrees and Certificates

- Economics Associate in Arts Degree (p. 321)
- Economics Associate in Arts Degree for Transfer (p. 321)

## Courses

**ECON 101 F Principles of Economics - Micro** **3 Units**  
**Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better or math skills clearance

54 hours lecture per term. This course presents the basic structure of the economic system of the United States and emphasizes the behavior of the firm within this structure. Special attention is given to the allocation of products and resources through the price mechanism. Topics treated include comparative economic systems, supply and demand, product and resource pricing, the market models, and general equilibrium. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 201)

**ECON 101HF Honors Principles of Economics - Micro** **3 Units**  
**Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better or math skills clearance

54 hours lecture per term. This Honors-enhanced course presents the basic structure of the economic system of the United States and emphasizes the behavior of the firm within this structure. Topics include comparative economic systems, supply and demand, product and resource pricing, the market modules, and general equilibrium. Attention will be given to the quantitative methods used by economists. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 201)



**ECON 102 F Principles of Economics - Macro 3 Units****Prerequisite(s):** ECON 101 F or ECON 101HF with a grade of C or better.

54 hours lecture per term. This course includes an analysis of macroeconomics, focusing on economic aggregates and the overall performance of the United States economy, with special emphasis on the role of government. Topics treated include national income, employment theory, business cycles, fiscal and monetary policies, equilibrium growth, and international economics. Some of the problems of specific sectors of the economy are examined. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 202)

**ECON 102HF Honors Principles of Economics-Macro 3 Units****Prerequisite(s):** ECON 101 F or ECON 101 HF with a grade of C or better

54 hours lecture per term. This Honors-enhanced course includes an analysis of macroeconomics, focusing on economic aggregates and the overall performance of the United States economy, with special emphasis on the role of government. Topics treated include national income, employment theory, business cycles, fiscal and monetary policies, equilibrium growth, and international economics. Some of the problems of specific sectors of the economy are examined. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: ECON 202)

## Economics Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03882

The **Economics Associate in Arts Degree** focuses on the systematic study of the production, conservation and allocation of resources in conditions of scarcity, together with the organizational frameworks related to these processes. Includes instruction in economic theory, micro- and macroeconomics. This degree requires a total of 20-24 units.

Code	Title	Units
<b>Required Courses (14 units):</b>		
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
ECON 102 F	Principles of Economics - Macro	3
or ECON 102HF	Honors Principles of Economics-Macro	
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
or PSY 161 F	Elementary Statistics for Behavioral Science	
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
or SOSC 120 F	Introduction to Probability and Statistics	
MATH 130 F	Calculus for Business	4
or MATH 151 F	Calculus I (formerly MATH 150AF)	
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
<b>List A: Select one course from the following (3-5 units):</b>		<b>3-5</b>
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
ACCT 101BF	Managerial Accounting	5
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
CIS 111 F	Introduction to Information Systems	4
or CIS 111HF	Honors Introduction to Information Systems	

MATH 152 F	Calculus II (formerly MATH 150BF) or MATH 152HF Honors Calculus II	4
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**List B: Select one course from the following or any course not already selected from List A (3-5 units):** **3-5**

MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
MATH 255 F	Linear Algebra	3

**Total Units 20-24**

### Program Student Learning Outcomes

**Outcome 1:** Utilize the supply/demand model to analyze and evaluate individual market outcomes.

**Outcome 2:** Utilize the aggregate demand/aggregate supply model to predict likely changes in the overall macro economy.

## Economics Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A36961

The **Economics Associate in Arts Degree for Transfer**, also referred to as the Economics AA-T degree, prepares students to transfer to CSU campuses and other colleges/universities that offer bachelor's degrees in economics. Ed Code Section 66746-66749 states students earning the Economics AA-T degree will be granted priority for admission as an economics major to a local CSU, as determined by the CSU campus to which the student applies. The Economics AA-T focuses on the systematic study of the production, conservation and allocation of resources in conditions of scarcity, together with the organizational frameworks related to these processes. Coursework includes instruction in economic theory, micro- and macroeconomics. This degree requires a total of 21-23 units.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (14 units):</b>		
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	

ECON 102 F	Principles of Economics - Macro	3
or ECON 102HF	Honors Principles of Economics-Macro	
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
or PSY 161 F	Elementary Statistics for Behavioral Science	
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
or SOSC 120 F	Introduction to Probability and Statistics	
MATH 130 F	Calculus for Business	4
or MATH 151 F	Calculus I (formerly MATH 150AF)	
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
<b>LIST A - Select one course (3-5 units):</b>		<b>3-5</b>
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
ACCT 101BF	Managerial Accounting	5
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
CIS 111 F	Introduction to Information Systems	4
or CIS 111HF	Honors Introduction to Information Systems	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
<b>LIST B - Select one course (4 units):</b>		<b>4</b>
<i>Select any LIST A course not already selected, or one of the courses below.</i>		
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
MATH 255 F	Linear Algebra	3
<b>Total Units</b>		<b>21-23</b>

## Program Student Learning Outcomes

**Outcome 1:** Use the supply/demand model to analyze and evaluate individual market outcomes.

**Outcome 2:** Use the aggregate demand/aggregate supply model to predict likely changes in the overall macro economy.

## Engineering

Division: Technology and Engineering

### Faculty

Mareike Claassen  
Tim Cobbler

### Degrees and Certificates

- Engineering Associate in Science Degree (p. 323)

## Courses

### ENGR 101AF Surveying I 4 Units

**Prerequisite(s):** MATH 142 F with a grade of C or better  
54 hours lecture and 54 hours lab per term. This course covers the principles and practices of measuring distances, elevations and angles. Topics include leveling, traversing, horizontal and vertical curves, topography, and use and care of instruments and equipment. (Degree Credit) (CSU) (C-ID: ENGR 180)

### ENGR 105 F Engineering CAD 4 Units

**Prerequisite(s):** MATH 142 F with a grade of C or better  
54 hours lecture and 54 hours lab per term. This is an introductory course which utilizes the CAD system for engineering applications. The course incorporates elementary principles associated with the various menu and command structures in computer-assisted drafting in order to develop solutions to 2D and 3D design problems. Topics included are file management, layering, orthographic projection, dimensioning, line types and axonometric projection. (Degree Credit) (CSU) (UC) (C-ID: ENGR 150)

### ENGR 110 F Introduction to Engineering 3 Units

**Prerequisite(s):** MATH 040 F with a grade of C or better  
**Advisory:** ENGL 100 F or 100HF  
54 hours lecture per term. This course is an introduction to engineering as a profession and its associated career responsibilities and opportunities. The course includes a selection of computational and mathematical methods and tools to be found useful in problem solving in engineering. Dimensional analysis, graphical techniques, and design theory in engineering analysis is also studied. The course includes the application of engineering and scientific problem methods to introductory electric circuit problems. This course also meets requirements for credit in Engineering. (Degree Credit) (CSU) (C-ID: ENGR 110)

### ENGR 201 F Statics 3 Units

**Prerequisite(s):** MATH 152 F or MATH 152HF and PHYS 221 F with a grade of C or better  
54 hours lecture per term. This course applies equilibrium conditions of force and moments to engineering problems. Algebraic and graphical methods are used. Topics include equilibrium of particles and rigid bodies, trusses, beams, frames, machines, centroids and friction. (Degree Credit) (CSU) (UC) (C-ID: ENGR 130)

### ENGR 203 F Electric Circuits 4 Units

**Prerequisite(s):** MATH 152 F or MATH 152HF and PHYS 222 F, with a grade of C or better.  
Corequisite: ENGR 203LF with a grade of C or better. 72 hours lecture per term. This course is an introduction to the analysis of electric circuits. Analysis techniques include nodal analysis, loop analysis, superposition method, Thevenin's Theorem, Norton's Theorem and source transformation. RLC and op-amp networks are analyzed under DC, AC-steady state, transient and variable frequency conditions. (Degree Credit) (CSU) (UC) (C-ID: ENGR 260)

### ENGR 203LF Electric Circuits Lab 1 Unit

**Prerequisite(s):** MATH 152 F or MATH 152HF and PHY 222 F, with a grade of C or better  
Corequisite: ENGR 203 F with a grade of C or better. 54 hours lab per term. This course covers basic electrical measurement techniques and experimental investigation of simple circuits, as well as computer simulations of transient circuits. (Degree Credit) (CSU) (UC) (C-ID: ENGR 260L)

**ENGR 220 F Programming and Problem-Solving in MATLAB 3 Units**

**Prerequisite(s):** MATH 151 F or MATH 151HF, with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to science and engineering. This course introduces the fundamentals of procedural and object-oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics, and mathematics. (Degree Credit) (CSU) (C-ID: ENGR 220)

## Engineering Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03834

The **Engineering Associate in Science Degree** is designed to prepare students for transfer to a university for a Bachelor of Science in Engineering degree. Students with a bachelor's degree in engineering may pursue careers in a variety of industries depending on their specialization in the engineering field. In order to be well prepared for the upper division engineering curriculum at a university after transfer, students should complete as many courses as possible from both the core engineering course list and the restricted electives list. This degree requires a total of 24-28 units.

Code	Title	Units
<b>Required Courses (24-28 units):</b>		
<b>Choose at least 6 units from Category A (Engineering courses) and then complete additional units in Category A and/or B (Supporting Courses):</b>		
<b>Category A (Engineering Courses):</b>		
ENGR 101AF	Surveying I	4
ENGR 105 F	Engineering CAD	4
ENGR 110 F	Introduction to Engineering	3
ENGR 201 F	Statics	3
ENGR 203 F	Electric Circuits	4
ENGR 203LF	Electric Circuits Lab	1
ENGR 220 F	Programming and Problem-Solving in MATLAB	3
<b>Category B (Supporting Courses):</b>		
CHEM 111AF	General Chemistry I	5
MATH 151 F	Calculus I (formerly MATH 150AF) or MATH 151HF Honors Calculus I (formerly MATH 150HF)	4
MATH 152 F	Calculus II (formerly MATH 150BF) or MATH 152HF Honors Calculus II	4
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4

PHYS 223 F General Physics III

4

**Total Units**

**24-28**

## Program Student Learning Outcomes

**Outcome 1:** Apply knowledge of mathematics, science, and engineering.

**Outcome 2:** Design and conduct experiments, as well as to analyze and interpret data.

**Outcome 3:** Identify, formulate, and solve engineering problems.

**Outcome 4:** Use the techniques, skills, and modern engineering tools necessary for engineering practice.

## English

Division: Humanities

## Faculty

Janna Anderson  
Joe Carrithers  
Darren Chiang-Schultheiss  
Jeanne Costello  
Sheilah Dobyms  
Pamela Dunsmore  
Doug Eisner  
Elli England  
Ronald Farol  
Brandon Floerke  
Christy Flores  
Danielle Fouquette  
Cynthia Guardado  
Heidi Guss  
Angela Henderson  
John Ison  
Darnell Kemp  
Katie King  
Bridget Kominek  
Samantha Krag  
Richard Levesque  
Annie Liu  
Michael Mangan  
Philip Mayfield  
Stefani Okonyan  
Kimberly Orlijan  
Meg O'Rourke  
Deborah Paige  
Roger Perez  
Stephanie Piazza  
Miguel Powers  
Rosalinda Ruiz  
Bianca Sabau  
Adriana Sanchez  
Daniel Scarpa  
Michael Schulze  
Ryan Shiroma  
Geoffrey Smith  
Blythe Tellefsen  
Tamara Trujillo  
Kimberly Vandervort

## Degrees and Certificates

- English Associate in Arts Degree (p. 328)
- English Associate in Arts Degree for Transfer (p. 329)

## Courses

### ENGL 059 F Developmental Writing

4 Units

**Advisory:** READ 056 F or any Reading course.

72 hours lecture per term. This course is designed for native speakers of English who need to build basic English skills in writing, reading and thinking. It provides instruction in writing effective sentences, reading short essays, thesis development, structure of paragraphs and essays, vocabulary building, basic critical thinking, and study skills. Pass/No Pass only.

### ENGL 060 F Preparation for College Writing

4 Units

**Prerequisite(s):** ENGL 059 F with a grade of Pass or recommended score on the English Placement test

**Advisory:** READ 096 F

72 hours lecture per term. This course is designed to meet the needs of students who are developing the writing and editing skills necessary for college writing. Students will review the writing process, thesis statements, essay structure, organization and general mechanics, read and analyze professional essays, and write essays with an emphasis on exposition and critical thinking. Pass/No Pass only.

### ENGL 099 F Accelerated Preparation for College Writing

4 Units

**Advisory:** READ 096 F or any other reading course.

72 hours lecture and 18 hours lab per term. This course prepares students for transfer-level college writing in a highly intensive, accelerated format and has no prerequisite. Students will review English fundamentals, read and analyze professional essays, and write essays with an emphasis on exposition and critical thinking. Pass/No Pass only.

### ENGL 100 F College Writing

4 Units

**Prerequisite(s):** ENGL 060 F or ENGL 099 F, with a grade of Pass, or ESL 186 F or ESL 190 F, with a grade of C or Pass, or equivalent or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 142 F.

72 hours lecture per term. This college-level composition course is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. The course includes research and documentation skills. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

### ENGL 100HF Honors College Writing

4 Units

**Prerequisite(s):** ENGL 060 F or ENGL 099 F, with a grade of Pass, or ESL 186 F or ESL 190 F, with a grade of C or Pass, or equivalent or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 142 F. 72 hours lecture per term. This Honors-enhanced course in composition is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. The course includes research and documentation skills. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

### ENGL 101 F Enhanced College Writing

5 Units

**Prerequisite(s):** ENGL 060 F or ENGL 099 F, with a grade of Pass, or ESL 186 F or ESL 190 F, with a grade of C or Pass, or equivalent or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 096 F.

90 hours lecture per term. This course in college-level composition is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. This course includes research and documentation skills. This course includes a fifth hour of instruction per week to help students develop the reading, writing, and study skills necessary for academic success. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

### ENGL 102 F Introduction to Literature

3 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This course will introduce a variety of literary genres such as fiction, poetry, drama and film. Students will read, analyze, and write about literature. Different critical approaches to literature will also be included. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 120)

### ENGL 102HF Honors Introduction to Literature

3 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This Honors-enhanced course is a continuation of ENGL 100 F, uses literary works as content for reading and writing with emphasis on analytical and critical approaches to drama, poetry and prose fiction. This course will employ enhanced teaching methods such as a seminar approach, more researched based writing assignments, and assignments calling for a higher level of critical thinking. The overall content and amount of work required in ENGL 102HF will be the same as non-honors ENGL 102 F. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 120)

### ENGL 103 F Critical Reasoning and Writing

4 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

72 hours lecture per term. This course is designed to develop critical thinking, reading, and writing skills beyond the level achieved in ENGL 100 F. This course will focus on the development of logical reasoning and analytical and argumentative writing skills as well as information literacy. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 105)

### ENGL 103HF Honors Critical Reasoning and Writing

4 Units

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

72 hours lecture per term. This Honors-enhanced course is designed to develop critical thinking, reading, and writing skills, beyond the level achieved in ENGL 100 F or ENGL 100HF. The course will focus on the development of logical reasoning and analytical and argumentative writing skills. As an Honors section, this class will offer an enhanced approach to critical thinking, calling on students to take a more active role in the learning process. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 105)

**ENGL 104 F Critical Thinking and Writing About Literature 4 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

72 hours lecture per term. This course will develop critical thinking, reading, and writing skills as they apply to the analysis of literature and literary criticism from diverse cultural sources and perspectives. There will be an emphasis on the techniques and principles of effective written argument as they apply to literature. Research strategies, information literacy and proper documentation of courses will also be emphasized. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 110)

**ENGL 105 F Introduction to Creative Writing 3 Units**

**Prerequisite(s):** Eligibility for ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, or as determined by multiple measures of assessment.

**Advisory:** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F.

54 hours lecture per term. This course includes writing original fiction, creative nonfiction, and poetry; study and application of forms, techniques, and literary elements of creative writing, and workshop experience, which provides an opportunity for analyzing and critiquing student writing. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: ENGL 200)

**ENGL 110 F Enhanced College Writing for Non-Native Speakers 5 Units**

**Prerequisite(s):** ESL 186 F or ESL 190 F, with a grade of C or better or Pass, or ESL skills evaluation.

**Advisory:** ESL 189 F.

90 hours lecture per term. This course emphasizes advanced reading, writing, and critical thinking skills that are essential for successful completion of a four-year college program including research and documentation skills. Writing assignments include expository and argumentative essays based on analysis of a variety of complex readings. This course includes additional instruction in grammatical structures and vocabulary usage to empower non-native speakers to write with increasing clarity and style. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 100)

**ENGL 201 F Intermediate College Writing 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This course is designed to develop academic writing and critical thinking skills beyond the level achieved in ENGL 100 F. The course will stress analysis and evaluation of sources, integration of a variety of rhetorical strategies, and research and documentation methods necessary for successful academic writing in essays, reports, critiques, exams, and research papers. Assignments are designed to address cross-curricular needs of students from a variety of majors. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 105)

**ENGL 203 F Introduction to Dramatic Literature 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF. 54 hours lecture per term. This course requires students to read, watch, and discuss a variety of plays from the Greeks to the contemporary period. Students will demonstrate analysis and evaluation of dramatic literature through essays and exams. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 204 F Introduction to Poetry 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 or ENGL 102HF.

54 hours lecture per term. This course covers the reading and study of poems from ancient to modern times in English and in translation. Poets represented may include Blake, Dickinson, Donne, Eliot, Frost, Keats, Neruda, Paz, Shakespeare, Whitman, Yeats and Levertov. The focus of the course is on the analysis of poetic techniques and the interpretation of universal themes. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 207 F The Short Story 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course involves the reading and discussion of selected short stories emphasizing analysis, interpretation, and evaluation. The course will focus on the short story as a genre. There will be an emphasis on the cultural and historical contexts of the texts covered and on the variety of writers and styles. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 208 F Introduction to Film Studies 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture and 18 hours lab per term. This course is an introduction to the discipline of film analysis from aesthetic, cultural, and historical perspectives. Films from a variety of countries and historical periods may be viewed and analyzed. Analysis, interpretation, and writing techniques will be emphasized. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 209 F Intermediate Creative Writing 3 Units**

**Prerequisite(s):** ENGL 105 F with a grade of C or better.

54 hours lecture per term. This course continues the study and application of writing original fiction, creative nonfiction and poetry. This course introduces the process of publishing. Workshops, peer critiquing and the submission process are emphasized. (Degree Credit) (CSU) (UC) AA GE

**ENGL 210 F Introduction to Language Structure and Use 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours lecture per term. This course offers students an introduction to the nature and structure of human language and use, covering fundamental elements of phonology, phonics, morphology, etymology and pragmatics. This course will explore first and second language acquisition and development. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**ENGL 211 F British Literature to 1800 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of British literature from the Middle Ages to 1800 and emphasizes literary trends and historical backgrounds, as well as the development of English. The course includes readings by such writers as the Pearl Poet, Chaucer, Shakespeare, Lanyer, Donne, Milton, Behn, Swift, and Pope. Texts will be considered from diverse perspectives. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 160)

**ENGL 211HF Honors British Literature to 1800 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of British literature from the Middle Ages to 1800 and emphasizes literary trends and historical backgrounds, as well as the development of English. This course includes readings by such writers as the Pearl Poet, Chaucer, Shakespeare, Lanyer, Donne, Milton, Behn, Swift, and Pope. Texts will be considered from diverse perspectives. This course emphasizes discussion and exchanges based on students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 160)

**ENGL 212 F British Literature since 1800 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of literature written in English from 1800 to the present and will emphasize literary trends and historical backgrounds. Students will read and discuss fiction, poetry, drama, and prose from the Romantic, Victorian, Modern, Postmodern and Postcolonial eras in Great Britain and other countries of the Empire and Commonwealth. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 165)

**ENGL 212HF Honors British Literature since 1800 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of literature written in English from 1800 to the present and will emphasize literary trends and historical backgrounds. Students will read and discuss fiction, poetry, drama, and prose from the Romantic, Victorian, Modern, Postmodern and Postcolonial eras in Great Britain and other countries of the Empire and Commonwealth. This course emphasizes discussion and exchange based upon students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 165)

**ENGL 221 F American Literature to the Civil War 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

This course is a survey of representative American works from before the era of colonization through the Civil War, emphasizing historic backgrounds of American fiction, poetry, and prose. The course includes major writers such as Hawthorne, Poe, Melville, Emerson, Douglass, Thoreau, Dickinson, and Whitman. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 221HF Honors American Literature to the Civil War 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of representative works by American writers from before the era of colonization through the Civil War, emphasizing historical backgrounds of American fiction, poetry, and prose. This course includes major writers such as Hawthorne, Poe, Melville, Emerson, Douglass, Thoreau, Dickinson, and Whitman. This course emphasizes discussion and exchange based upon students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 130)

**ENGL 222 F American Literature from the Civil War to the Present 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of representative works by American writers since 1865, and it emphasizes literary trends in and historic backgrounds of American drama, fiction, poetry, and prose. The course includes a consideration of Realism, Regionalism, Naturalism, Modernism, and Postmodernism through the study and critical discussion of representative writers central to the development of American literature. The emphasis is on the diversity of American subjects and styles. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 135)

**ENGL 222HF Honors American Literature from the Civil War to the Present 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a survey of representative works by American writers since 1865, and it emphasizes literary trends in and historic backgrounds of American drama, fiction, poetry, and prose. This course includes a consideration of Realism, Regionalism, Naturalism, Modernism, and Postmodernism through the study and critical discussion of representative writers central to the development of American literature. The emphasis is on the diversity of American subjects and styles. This course emphasizes discussion and exchange based on students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 135)

**ENGL 224 F World Literature through the Early Modern Period 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, and other areas, from antiquity to the mid- or late-17th century. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 140)

**ENGL 224HF Honors World Literature through the Early Modern Period 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This Honors-enhanced course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, and other areas, from antiquity to the mid- or late-17th century. This course Honors seminar course emphasizes discussion and exchange based on students' presentations and independent research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 140)

**ENGL 225 F World Literature since the Early Modern Period 3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and Latin America from the late 17th century to today. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 145)

**ENGL 225HF Honors World Literature since the Early Modern Period****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This Honors-enhanced course is a comparative study of selected works, in translation and English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and Latin America from the late 17th century to today. This course emphasizes discussion and exchange based on students' presentations and independent research. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 145)

**ENGL 234 F Introduction to Shakespeare****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is designed to introduce students to William Shakespeare's tragedies, comedies, histories and romances, as well as poetry. Students will develop an understanding of Shakespeare's plays, their original context and their relevance for today, considered from diverse perspectives. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 234HF Honors Introduction to Shakespeare****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

This Honors-enhanced course introduces students to William Shakespeare's tragedies, comedies, histories and romances, as well as poetry. Students will develop an understanding of Shakespeare's plays, their original context and their relevance for today, considered from diverse perspectives. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ENGL 239 F Survey of Children's Literature****3 Units****Prerequisite(s):** Eligibility for ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, or as determined by multiple measures of assessment.**Advisory:** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, and ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course traces the historical and cultural development of children's literature throughout the world, from its multiple origins in the oral tradition to its contemporary emphasis on written excellence and pictorial artistry. The course focuses on comparative and critical approaches to the multicultural elements in nursery rhymes, poetry, fables, folk tales, myth, sacred literature, picture books, juvenile literature, and works of non-fiction, with emphasis on contemporary literature and the emergence of ethnic writers in children's literature. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: ENGL 180)

**ENGL 240 F Survey of Young Adult Literature****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course presents an overview of young adult literature, including its history, characteristics, literary merit, and cultural influence. This course focuses on comparative and critical approaches to literary works intended for young adults (7th-12th grader) and the study of the literature's relevance to its target audience, with an emphasis on texts representative of diverse ethnic and underrepresented groups. Students will survey current trends and issues in the field of the literature's relationship to adolescent psychosocial development and to ethnic and cultural identity development. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 243 F Folklore and Mythology****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

This course is an introductory study of the folklore and mythology of the world through literature, including such cultures as Egyptian, Babylonian, Greek, Norse, Hindu, Chinese, Scandinavian, Native American, Central and South American, and African. This course will include a comparative study of mythic elements and patterns with their modern parallels. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 243HF Honors Folklore and Mythology****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course is an introductory study of the folklore and mythology of representative cultures of the world through literature including such cultures as Greek, Norse, Babylonian, American Indian, European, Mexican, Hindu, and Chinese. The course will include a comparative study of mythic elements and patterns with their modern parallels in both Eastern and Western civilizations. This honors section is conducted as a seminar and relies on independent student research done outside of class. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 245 F The Bible as Literature****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF.

This course involves the study of the English Bible as literature, focusing on its literary forms and techniques. The course emphasizes analysis of such forms as narrative prose, poetry, letters, and wisdom literature. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 246 F The Novel****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

This course is a study of the novel as an art form, concentrating on representative novels illustrating the richness of the form. Emphasis will be placed on developing the students' analytical skills. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 248 F Science Fiction****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of science fiction and speculative fiction. This course emphasizes the literary, social, economic, cultural and environmental contexts of representative works and traces the development of the genre from early scientific romances and speculative works through current trends. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 249 F Survey of Chicano/a Literature****3 Units****Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course offers students a survey of Chicano/a literature from its beginnings in the nineteenth century to the present day. It emphasizes the literary, historical, social, political and cultural context of Chicano/a fiction, poetry, theater and prose. Students can expect to read major literary classics as well as the works of previously less recognized writers. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 251 F Survey of Native American Literature** **3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of Native American literary tradition from its beginnings as an oral tradition to contemporary works by representative authors. This course emphasizes the historical, cultural and literary context of work written by Native American authors in a variety of genres including poetry, fiction, autobiography, told-to autobiographies, oral tradition, folklore and mythology, speeches, and mixed genres. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ENGL 254 F Intermediate Creative Writing: Poetry** **3 Units**  
**Prerequisite(s):** ENGL 105 F with a grade of C or better

**Advisory:** ENGL 102 F or ENGL 102HF

This course continues the development of creative writing skills with an emphasis on poetry. Students will write original poetry, study forms, techniques, and literary elements of poetry including classical poetic forms and the free-verse tradition, and study non-fiction essays related to the writing of poetry. (Degree Credit) (CSU) (UC) AA GE

**ENGL 255 F Intermediate Creative Writing: Fiction** **3 Units**  
**Prerequisite(s):** ENGL 105 F with a grade of C or better

**Advisory:** ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course includes writing original fiction; study and application of forms, techniques and literary elements of fiction including classic short story and novel forms; study of modern, less traditional forms such as creative non-fiction; study of essays related to the writing of fiction; and workshop experience which provides an opportunity for analyzing and critiquing student writing. (Degree Credit) (CSU) (UC) AA GE

**ENGL 280 F Language Arts Tutoring Practicum** **3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better.

and recommendation from an English instructor  
**Corequisite:** ENGL 103 F or ENGL 103HF, or ENGL 104 F, or ENGL 201 F. 36 hours lecture and 54 hours lab per term. This course provides training for students to acquire specific knowledge, skills and techniques for tutoring in writing and provides strong recommendation for future employment in Fullerton College's Writing Center. Supervised, "hands-on" tutoring lab hours are part of instruction. (Degree Credit) (CSU)

**ENGL 299 F English Independent Study** **1 Unit**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 F or ENGL 110 F, with a grade of C or better.

54 hours independent study per term. This course will provide advanced students the opportunity for independent study that will enrich their academic experience in English. Students may choose to expand and deepen their knowledge in areas of composition, language, literature or creative writing, or special topics not covered in existing courses offered in English. Students will attend weekly arranged individual conferences or group meetings. (Degree Credit) (CSU) (UC review required) (UC Credit Limitation depending upon course content)

## English Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A03866

The **English Associate in Arts Degree** is designed to prepare students to read and write about literature critically and to understand key historical and generic influences in the production and reception of literature and other cultural texts. The degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (3 units):</b>		
ENGL 102 F	Introduction to Literature	3
or ENGL 102HF	Honors Introduction to Literature	
<b>Restricted Electives (6 units):</b>		
<i>Students must complete two survey courses from the Restricted Electives (Honors versions also qualify). One course must be chosen from Part One of American Literature, British Literature or World Literature. The other course must be chosen from Part Two of American Literature, British Literature or World Literature.</i>		
ENGL 211 F	British Literature to 1800	3
or ENGL 211HF	Honors British Literature to 1800	
or ENGL 221 F	American Literature to the Civil War	
or ENGL 221HF	Honors American Literature to the Civil War	
or ENGL 224 F	World Literature through the Early Modern Period	
or ENGL 224HF	Honors World Literature through the Early Modern Period	
and		
ENGL 212 F	British Literature since 1800	3
or ENGL 212HF	Honors British Literature since 1800	
or ENGL 222 F	American Literature from the Civil War to the Present	
or ENGL 222HF	Honors American Literature from the Civil War to the Present	
or ENGL 225 F	World Literature since the Early Modern Period	
or ENGL 225HF	Honors World Literature since the Early Modern Period	
<b>Select one course from the following (3 units):</b>		
ENGL 203 F	Introduction to Dramatic Literature	3
ENGL 204 F	Introduction to Poetry	3
ENGL 207 F	The Short Story	3
ENGL 208 F	Introduction to Film Studies	3
ENGL 246 F	The Novel	3
<b>Select six additional units from any of the above courses not already selected or from the following (6 units):</b>		
ENGL 105 F	Introduction to Creative Writing	3
ENGL 209 F	Intermediate Creative Writing	3
ENGL 210 F	Introduction to Language Structure and Use	3
ENGL 234 F	Introduction to Shakespeare	3
or ENGL 234HF	Honors Introduction to Shakespeare	
ENGL 239 F	Survey of Children's Literature	3
ENGL 240 F	Survey of Young Adult Literature	3
ENGL 243 F	Folklore and Mythology	3
or ENGL 243HF	Honors Folklore and Mythology	
ENGL 245 F	The Bible as Literature	3
ENGL 248 F	Science Fiction	3
ENGL 249 F	Survey of Chicano/a Literature	3
ENGL 251 F	Survey of Native American Literature	3
ENGL 254 F	Intermediate Creative Writing: Poetry	3
ENGL 255 F	Intermediate Creative Writing: Fiction	3
ENGL 280 F	Language Arts Tutoring Practicum	3
SPAN 205 F	Introduction to Spanish Literature	3



SPAN 206 F	Introduction to Latin American Literature	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Analyze a text based on its literary, historical, social, and/or cultural significance.

**Outcome 2:** Explain the stylistic, formal, thematic, and/or rhetorical elements of a text in order to reveal its artistic and/or historical contributions to literature.

## English Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A31580

The **English Associate in Arts Degree for Transfer**, also called the English AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in English. Ed Code Section 66746-66749 states students earning the English AA-T degree will be granted priority for admission as an English major to a local CSU, as determined by the CSU campus to which the student applies. This degree is designed to prepare students to read and write about literature critically and to understand key historical and generic influences in the production and reception of literature and other cultural texts. While a baccalaureate degree is recommended preparation for those considering careers in fields such as writing, journalism, education, training and development, sales, community relations, the ministry, law, business, entertainment, nonprofit organizations and government, completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. This degree requires a total of 18-21 units.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses - Select one of the two options below (4-7 units):</b>		

*OPTION ONE - Select two courses (6-7 units):*

ENGL 102 F	Introduction to Literature	3
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or ENGL 102HF Honors Introduction to Literature

<i>and</i>		
ENGL 103 F	Critical Reasoning and Writing	4
or ENGL 103HF Honors Critical Reasoning and Writing		
ENGL 201 F	Intermediate College Writing	3

*OPTION 2 - Select one course (4 units):*

ENGL 104 F	Critical Thinking and Writing About Literature	4
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**LIST A: Students must complete two survey courses from LIST A, and Honors versions of these courses also qualify. One course must be chosen from Part One of American Literature, or British Literature, or World Literature. The other course must be chosen from Part Two of American Literature, or British Literature, or World Literature (6 units):**

ENGL 211 F	British Literature to 1800	3
or ENGL 211HF Honors British Literature to 1800		
or ENGL 221 F American Literature to the Civil War		
or ENGL 221HF Honors American Literature to the Civil War		
or ENGL 224 F World Literature through the Early Modern Period		
or ENGL 224HF Honors World Literature through the Early Modern Period		

**AND**

ENGL 212 F	British Literature since 1800	3
or ENGL 212HF Honors British Literature since 1800		
or ENGL 222 F American Literature from the Civil War to the Present		
or ENGL 222HF Honors American Literature from the Civil War to the Present		
or ENGL 225 F World Literature since the Early Modern Period		
or ENGL 225HF Honors World Literature since the Early Modern Period		

**LIST B - Select courses based on option chosen for Required Core Courses.**

*OPTION 1 from LIST B (3 units) OR*

*OPTION 2 from LIST B (6 units)*

*(Any course from LIST A not used above)*

ENGL 105 F	Introduction to Creative Writing	3
ENGL 203 F	Introduction to Dramatic Literature	3
ENGL 204 F	Introduction to Poetry	3
ENGL 207 F	The Short Story	3
ENGL 246 F	The Novel	3

**List C - Select one course (3-5 units):**

*(Any course from LIST A and LIST B not used above)*

ENGL 208 F	Introduction to Film Studies	3
ENGL 209 F	Intermediate Creative Writing	3
ENGL 210 F	Introduction to Language Structure and Use	3
ENGL 234 F Introduction to Shakespeare		
or ENGL 234HF Honors Introduction to Shakespeare		
ENGL 239 F	Survey of Children's Literature	3
ENGL 240 F	Survey of Young Adult Literature	3
ENGL 243 F Folklore and Mythology		
or ENGL 243HF Honors Folklore and Mythology		
ENGL 245 F	The Bible as Literature	3

ENGL 248 F	Science Fiction	3
ENGL 249 F	Survey of Chicano/a Literature	3
CHIN 203 F	Intermediate Chinese - Mandarin III	4
CHIN 204 F	Intermediate Chinese - Mandarin IV	4
FREN 203 F	Intermediate French III	4
FREN 204 F	Intermediate French IV	4
GERM 203 F	Intermediate German III	4
GERM 204 F	Intermediate German IV	4
ITAL 203 F	Intermediate Italian III	4
ITAL 204 F	Intermediate Italian IV	4
JAPN 203 F	Intermediate Japanese III	4
JAPN 204 F	Intermediate Japanese IV	4
SPAN 201 F	Spanish for the Spanish Speaker	5
SPAN 203 F	Intermediate Spanish III	4
SPAN 204 F	Intermediate Spanish IV	4
SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3
SPAN 207 F	Children's Literature/Spanish	3
<b>TOTAL UNITS:</b>		<b>18-21</b>

## Program Student Learning Outcomes

**Outcome 1:** Analyze a work of literature based on its literary, historical, social, and/or cultural significance.

**Outcome 2:** Explain the stylistic, formal, thematic, and/or rhetorical elements of a work of literature in order to reveal its artistic and/or historical contributions to literature.

## Environmental Sciences

Division: Natural Sciences

### Faculty

Royden Hobbs  
Tom Morris

### Degrees and Certificates

- Environmental Science Associate in Science Degree (p. 331)

### Courses

#### ENVS 105 F Environmental Biology 3 Units

54 hours lecture per term. This course is for non-science majors and introduces the student to the principles of organismal biology, framed in the context of Earth's natural environments. The course examines the interactive relationships between the environment and biological phenomena on all levels. In this exposé, the course explores Earth's environmental systems including: global climate system, atmospheric system, aquatic systems, and terrestrial and aquatic ecosystems. The course highlights life's influence on these systems in terms of core biological phenomena including: molecular biology, cellular biology, cellular respiration, photosynthesis, genetics, ecology, evolution, and biodiversity. The course analyzes how both robust and delicate biological systems adjust to a variety of human influences to produce complex environmental transformations. The course emphasizes the fundamental utility of reason and empiricism in scientific discovery and understanding. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

#### ENVS 105LF Environmental Biology Lab 1 Unit

**Advisory:** Concurrent enrollment in ENVS 105 F or completion of ENVS 105 F with a grade of C or better.

9 hours lecture and 27 hours lab or field study per term. This course reveals core biological principles framed in lab and field investigations. Exercises focus on the interactive relationships between biological and physical phenomena on all levels (molecular, cellular, organismal, and ecological). Lab investigations promote the skills of objective experimental design, systematic experimental execution, and accurate results analysis. Field investigations strengthen students' powers of observation in the natural world. Skill development includes making thorough empirical observations, situational awareness of the interactive dynamics of living and non-living components in natural settings, and becoming knowledgeable of local wild species. The course emphasizes the fundamental utility of reason and empiricism in scientific discovery and understanding. Some fees may be required for parking and entrance fees at field trip locations. (Degree Credit) (CSU) (UC) CSU GE, IGETC

#### ENVS 140 F Introduction to the Natural History of Birds (formerly Birds of Southern California) 1-2 Units

18 hours lecture per term. This course is a field-oriented course designed to introduce wildlife enthusiasts to the remarkable diversity of birds in Southern California. Students will learn how to identify birds using visual, auditory, and habitat clues in the field. Proper use of field guides, binoculars and spotting scopes, and birding ethics will be emphasized. Although the primary emphasis of this course is placed on bird identification, the ecological context for each species also will be treated, including: ecological niche, life history patterns, migratory patterns, and special adaptations. Field trips are required and may include day trips and/or overnight camping trips. (Degree Credit) (CSU)

#### ENVS 141 F Desert Natural History 1 Unit

18 hours lecture per term. This course applies ecological principles to investigate desert environments. Activities include lecture on ecological principles and field study in selected California desert ecosystems. Lectures will provide an overview of field natural history concepts, including identification of plants and animals, adaptations to arid environments and ecological interrelationships. Field trips are required and will take place during scheduled class times. Fees may be required to cover camping and site entrance fees. (Degree Credit) (CSU)

#### ENVS 142 F Geology and Marine Biology of the Channel Islands 2 Units

36 hours lecture per term. This course involves lecture and field study of geological and marine biological processes and features in the Channel Islands region of Southern California. Lectures will examine how to recognize key geologic landforms and marine habitats in the field. Particular attention will be focused on the relationship between geology and the marine life. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. An additional fee will be required to cover parking, entrance fees, transportation to island, camping, and site guide services. (Degree Credit) (CSU)

#### ENVS 196 F Regional Field Studies: Environmental Sciences 1 or 2 Units

18-36 hours lecture per term. Classes are conducted in the short course format, and require participation in fieldwork in a selected biological community in southwestern United States, Mexico, or Costa Rica. Field studies are designed to develop a strong foundation in ecological facts and principles. Emphasis is placed on identifying and studying ecological issues through careful observation, data collection and analysis. Students are trained in various field study techniques and the use of science instruments. Topics include auto-ecological and synecological studies of biological communities, monitoring abiotic factors, field identification of flora and fauna, and human impact on the study area. (Degree Credit) (CSU)

# Environmental Science Associate in Science Degree

## Requirements

PROGRAM CODE: 2S08435

The **Environmental Sciences Associate in Science Degree** program emphasizes the development of skills in natural history and ecology. Specified coursework trains students to identify, describe, and analyze natural environments in terms of native species and ecological processes. The program's many field-oriented lecture and laboratory courses investigate a variety of natural settings including chaparral, woodland, estuary, coastal ocean, island, desert, and mountain environments. Accompanying lecture courses provide the theoretical foundation to support comprehensive field studies. The Environmental Sciences Associate in Science Degree is designed to provide students with a breadth and depth of both conceptual and field-oriented knowledge. This degree requires a total of 22-26 units in the major in addition to other graduation requirements.

Code	Title	Units
<b>Required Courses (8 units):</b>		
ENVS 105 F	Environmental Biology	3
ENVS 105LF	Environmental Biology Lab	1
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 130LF	Introduction to Oceanography: Field Experience	1
<b>Restricted Lecture/Lab Electives (10-13 units):</b>		<b>10-13</b>
ANTH 101 F	Physical Anthropology	3
or ANTH 101HF	Honors Physical Anthropology	
ANTH 101LF	Physical Anthropology Lab	1
ANTH 109 F	Primate Behavior	3
BIOL 170 F	Organismal Biology	5
BIOL 222 F	Marine Biology	3
BIOL 274 F	General Ecology	4
BIOL 276 F	Genetics and Evolutionary Biology	4
ESC 101 F	Earth Science Survey	3
ESC 101LF	Earth Science Survey Lab	1
ESC 103 F	Historical Geology	4
ESC 110 F	Introduction to Climate Science	3
GEOG 120 F	Global Environmental Problems	3
GEOG 230 F	Introduction to Geographic Information Systems (formerly GEOG 281AF)	3
PE 239 F	Open Water Scuba Diving	3
<b>Restricted Field-Oriented Electives (4-5 units):</b>		<b>4-5</b>
ENVS 140 F	Introduction to the Natural History of Birds (formerly Birds of Southern California)	1
ENVS 141 F	Desert Natural History	1
ENVS 142 F	Geology and Marine Biology of the Channel Islands	2
ESC 141 F	Geology of the Anza-Borrego Desert State Park Area	1
ESC 142 F	Geology of Mojave Desert Area	1

ESC 144 F	Geology of Southern California Mountain Areas	1
ESC 145 F	Geology of the Death Valley National Park Area	1
ESC 146 F	Geology of the Joshua Tree National Park Area	1

**Total Units** **22-26**

## Program Student Learning Outcomes

**Outcome 1:** Examine, identify and describe natural ecosystems.

**Outcome 2:** Examine, distinguish and describe the ecological communities that compose natural ecosystems.

**Outcome 3:** Analyze and explain the organization and dynamics of natural ecosystems.

## Ethnic Studies

Division: Social Sciences

### Faculty

Amber Rose González  
Ziza Delgado Noguera  
Arnetta Villela-Smith

### Degrees and Certificates

- Africana Studies Associate in Arts Degree (p. 334)
- American Indian and Indigenous Studies Associate in Arts Degree (p. 334)
- Asian/Pacific Islander American Studies Associate in Arts Degree (p. 335)
- Chicanx and Latinx Studies Associate in Arts Degree (p. 336)
- Ethnic Studies Associate in Arts Degree (p. 336)

### Courses

**ETHS 101 F American Ethnic Studies** **3 Units**  
54 hours lecture per term. This introductory course is a comparative and interdisciplinary examination of the experiences of Black, Indigenous and People of Color in the United States from the colonial era to today. Students will analyze historical themes through an intersectional analysis that interrogates categories of identity and power including race, ethnicity, class, gender, sexuality, religion, etc. The course explores theoretical concepts and social processes including colonization and migration; racialization and the development of race as a social category; the relationship between race and U.S. imperialism; the persistence of social inequalities; and the long historical struggle for racial justice. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

**ETHS 101HF Honors American Ethnic Studies****3 Units**

54 hours lecture per term. This Honors-enhanced course is a comparative and interdisciplinary examination of the experiences of Black, Indigenous People of Color in the United States from the colonial era to today. Students will analyze historical themes through an intersectional analysis that interrogates categories of identity and power including race, ethnicity, class, gender, sexuality, religion, etc. The course explores theoretical concepts and social processes including colonization and migration; racialization and the development of race as a social category; the relationship between race and U.S. imperialism; the persistence of social inequalities; and the long historical struggle for racial justice. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

**ETHS 111 F Women of Color in the U.S.****3 Units**

54 hours lecture per term. This course is a comparative study of the experiences of women of color in the United States. Ranging from theoretical to first-person narrative, the interdisciplinary readings in this course examine interlocking categories of power that include race, ethnicity, gender, sexuality, class, and culture. Students will explore feminist of color critiques of imperialism, capitalism, nationalism, immigration, labor, gendered violence, representation, and public policy. We will focus on oppositional consciousness and resistance to oppression in the scholarship and literature of African American, Asian American, Pacific Islander American, Caribbean, Latinx, Indigenous, and Arab American feminists and the ways they engage in liberatory practices that aim to eliminate social inequities and all forms of oppression. Students may be required to attend a relevant academic conference or community event as part of the course. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 120

**ETHS 129 F Introduction to African-American Studies****3 Units**

54 hours lecture per term. This survey course presents the student with an examination of the African American experience, and traces the role and contributions of Black people in the development of the United States. Included are such major topics as origins in Africa and the historical development of the Black community and culture as they evolved in the United States. An emphasis will be placed on the basic terms and references that give substance to Africana studies, as well as contemporary Black issues. This course fulfills the Multicultural Education Requirement for graduation. Field trips outside of regularly-scheduled class time will be required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 130 F African-American History I****3 Units**

54 hours lecture per term. This course is a survey of the African-American experience in the United States from its African roots to 1865, emphasizing the roles of African Americans in the political, social, and economic development of American society. Topics covered include: the trans-Atlantic slave trade, the process of enslavement in the Americas, slave life on the plantation, slave resistance, the socio-economic conditions of free Blacks in the United States, the politico-economic dispute regarding slavery and its consequences in the outbreak of the American Civil War, and the emancipation of the enslaved Black population. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ETHS 131 F African-American History II****3 Units**

54 hours lecture per term. This course is a survey of the African-American experience in the United States from the Era of Reconstruction to the present, emphasizing the roles of African Americans in the political, social, and economic development of American society. Topics covered include: the various phases of the Reconstruction period; Black life in the "New South"; the debates over educational and socio-economic progress; the migrations to the North and West; the struggles of the Black working class; the impact of the two world wars on Black life; the Civil Rights Movement; militancy during the 1960s; and the Black experience in contemporary America. Field trips may be required outside of regularly scheduled class times. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ETHS 150 F Introduction to Chicana/o Studies (formerly ETHS 140 F)****3 Units**

54 hours lecture per term. This course is an introduction to the field of Chicana/o Studies. It is designed to acquaint students with the most significant social, political, economic, and historical aspects of the Chicana/o experience in the United States. As such, the course is interdisciplinary in nature and critically analyzes the societal context in which Chicanas/os have sought to maintain their culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ETHS 151 F Chicana/o History I (formerly ETHS 141 F)****3 Units**

54 hours lecture per term. This course is a survey of the Chicana/o experience from the Mesoamerican era to the Mexican American War. Topics covered include: Mesoamerican civilizations, Spanish conquest and settlement in the Americas, the African influence in New Spain, mestizaje and racial identity, life in the Spanish and Mexican borderlands pre- and post-Mexican Independence, and the Mexican American War. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 152 F Chicana/o History II (formerly ETHS 141 F)****3 Units**

54 hours lecture per term. This course is a survey of the Chicana/o experience from the Mexican American War to the present. Topics covered include: the impact of the Mexican American War on the lives of Mexicans in the American Southwest, immigration, labor struggles, racial discrimination, the struggles for civil rights and social justice in the 19th and 20th centuries, the construction of a "Chicana/o" identity and the Chicano experience in contemporary America. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 153 F Chicana/o and Latina/o Contemporary Issues (formerly ETHS 142 F)****3 Units**

54 hours lecture per term. This course focuses on the contemporary issues, major characteristics, and significant contributions of Chicana/o and Latina/o communities in the United States. An interdisciplinary approach will be used to examine areas including, but not limited to, art and culture, education, law, politics, religion, economics, and the family. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 153HF Honors Chicana-o and Latina-o Contemporary Issues****3 Units**

54 hours lecture per term. This Honors-enhanced course focuses on the contemporary issues, major characteristics, and significant contributions of Chicana/o and Latina/o communities in the United States. An interdisciplinary approach will be used to examine areas including, but not limited to, art and culture, education, law, politics, religion, economics and the family. Some field study and research may be required to provide relevant experiences. This course fulfills Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 159 F Introduction to American Indian Studies****3 Units**

54 hours lecture per term. This course is an introduction to the interdisciplinary field of American Indian Studies. It is designed to acquaint students with the most significant social, political, religious, and artistic aspects of various Indigenous peoples of North America within a transnational context, focusing on the twentieth century to the present. Students will critically analyze topics including Native philosophy and religious traditions, settler colonialism, urbanization, intertribal relations, identity, gender and sexuality, art, literature, and cultural production, environmental justice, and the context in which Indigenous peoples have sought to maintain their sovereignty. Students may be required to attend a relevant academic conference or community event as part of the course. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 160 F American Indian History (formerly History of the Native Americans)****3 Units**

54 hours lecture per term. This course is a historical survey of the Native American experience from creation to the present. Topics covered include civilizations across North America; Native world views and religious traditions; conquest and settler colonialism; analysis of political, cultural, economic, legal and military relationships that developed between American Indians and foreign nations; and the long historical struggle for tribal sovereignty. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit), AA GE, CSU GE, IGETC

**ETHS 170 F Introduction to Asian Pacific Islander American Studies****3 Units**

54 hours lecture per term. This course is an interdisciplinary field of study that explores historical and contemporary Asian/Pacific Islander American political, social, and cultural practices and experiences in the United States. This course examines the foundations and theories of Asian/Pacific Islander American Studies and its contemporary approaches to the study of APIA peoples. Through a thematic approach that will allow us to understand diverse communities in relation to each other, emphasis is placed on the transnational and transpacific considerations of race, ethnicity, (im)migration, gender, sexuality, and class as it relates to API communities. Through the use of academic and community-based scholarship, contemporary themes includes imperialism and colonization, militarization and occupations, social movements and activism, and visual and performing arts. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 171 F Asian Pacific Islander American History****3 Units**

54 hours lecture per term. This course is a historical survey of the Asian Pacific Islander American experience in the United States focusing on the 19th and 20th centuries. Various communities will be examined including Chinese, Japanese, Korean, Native Hawaiian, Filipino, Samoan, South Asian, and Southeast Asian. Students will explore topics ranging from US imperialism, intervention, and foreign policy; Orientalism and anti-Asian racism; (im)migration, exclusion, and settlement patterns; labor and the economy; identity, community formation, and struggles for civil rights and social justice. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ETHS 199 F Ethnic Studies Independent Study****1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students must contact the supervising instructor to develop a learning contract for their particular research topic. Students who successfully complete this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required.)

**ETHS 202 F Race, Ethnicity and Pop Culture****3 Units**

54 hours lecture per term. This course examines the contributions of people of color in film and popular culture and surveys the cultural, economic, social, and political forces that shape their representations in media. In this course, students will analyze representations of race, gender, and sexuality in US film, television, and new media utilizing ethnic studies theoretical frameworks and methods including queer of color critique, women of color feminisms, aesthetics, performance studies, cultural studies, and new media studies. Popular culture and independent productions are analyzed to understand how media representations reproduce and contest contemporary articulations of racialized, gendered, and sexualized experiences and social norms within contemporary society. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ETHS 235 F Contemporary Social Justice Movements****3 Units**

54 hours lecture per term. This course is an examination of the Post-World War II movements for social justice among people of color in the United States. It analyzes the socio-historical factors that led to struggles for racial, gender, economic, educational, and environmental justice while comparing their strategies and outcomes. Topics covered include a history of early civil rights movements, radical power movements of the 1960s, and contemporary issues and movements that seek to eradicate racism, classism, sexism, and homophobia in the United States and around the world. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

**ETHS 235HF Honors Contemporary Social Justice****3 Units**

54 hours lecture per term. This Honors-enhanced course is an examination of the Post-World War II movements for social justice among people of color in the United States. It analyzes the socio-historical factors that led to struggles for racial, gender, economic, educational, and environmental justice while comparing their strategies and outcomes. Topics covered include a history of early civil rights movements, radical power movements of the 1960's, and contemporary issues and movements that seek to eradicate racism, classism, sexism, and homophobia in the United States and around the world. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC, C-ID: SJS 110

**ETHS 299 F Ethnic Studies Advanced Independent Study** **1 Unit**  
54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students must contact the supervising instructor to develop a learning contract for their particular research topic. Students who successfully complete this course will be awarded elective credit in the Social Services area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required.)

## Africana Studies Associate in Arts Degree

Division: Social Sciences

### Requirements

PROGRAM CODE: 2A39434

The **Africana Studies Associate in Arts Degree** provides students a holistic and transdisciplinary education with a focus on the historical and contemporary experiences of persons of African descent in the United States and globally. AFRS is committed to critical theorizations of race, ethnicity, class, gender, and sexuality and interrogating interlocking systems of oppression in order to unsettle and disrupt them. AFRS curriculum confronts unethical educational approaches, recovers and analyzes lost and distorted histories, and expands and imparts knowledge through critical and theoretical inquiry, scholarly research, creative production, and policy analysis.

Africana Studies cultivates activist-scholars by providing students opportunities to bridge academic study with community engagement. Students will analyze issues about the African and African diasporic communities while developing a critical and intersectional understanding of race, ethnicity, class, gender, and power in American society and globally. Graduates develop a liberatory vision for social change and acquire skills in community-centered leadership, media literacy, critical and creative thinking, and an ability to advance social justice for African and African diasporic communities.

The major prepares students for transfer and career pathways that serve Africana populations in areas/fields such as education and research, community advocacy and organizing, city planning, health and human services, conflict resolution, marketing and communications, law and policy, fine and performing arts, multicultural affairs, and more. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
ETHS 101 F or ETHS 101HF	American Ethnic Studies Honors American Ethnic Studies	3
ETHS 111 F	Women of Color in the U.S.	3
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F or ETHS 131 F	African-American History I African-American History II	3
<b>Restricted Electives - Select two courses (6 units):(6-8 units):</b>		<b>6</b>
<i>NOTE: Courses can only be used in one area towards degree requirements (Required Core or Restricted Electives).</i>		
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3

ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History	3
ETHS 202 F	Race, Ethnicity and Pop Culture	3
ETHS 235 F	Contemporary Social Justice Movements	3
or ETHS 235HF	Honors Contemporary Social Justice	
HIST 154 F	Ancient Egypt	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Summarize the key terminology, theoretical orientations, principles and methods used in the field of Africana Studies.

**Outcome 2:** Identify and explain historical trends and common themes in African-American history from pre-colonial Africa to the present.

**Outcome 3:** Identify the culture, political and socioeconomic heterogeneity that exists within and between Africana communities.

## American Indian and Indigenous Studies Associate in Arts Degree

Division: Social Sciences

### Requirements

PROGRAM CODE: 2A40547

The **American Indian and Indigenous Studies Associate in Arts Degree** is designed to provide students a holistic and transdisciplinary education with a focus on the historical and contemporary experiences of Indigenous peoples of North America. American Indian and Indigenous Studies (AIIIS) is committed to critical theorizations of settler colonialism, indigeneity, gender, sexuality, and sovereignty and to the interrogation of interlocking systems of oppression in order to unsettle and disrupt them.

AIIIS cultivates activist-scholars by providing students opportunities to bridge academic study with community engagement. Graduates develop a decolonial and liberatory vision for social change, an understanding of Indigenous core values and leadership models, and acquire skills in media literacy, critical and creative thinking, and an ability to advance sovereignty for Indigenous peoples.

The major prepares students for transfer and career pathways that serve Indigenous populations in areas/fields such as education and research, cultural and resource management, health and human services, marketing and communications, tribal law and policy, fine and performing arts, American Indian affairs, and more. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
ETHS 101 F or ETHS 101HF	American Ethnic Studies Honors American Ethnic Studies	3
ETHS 111 F	Women of Color in the U.S.	3
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
<b>Restricted Electives (6 units):</b>		
ENGL 251 F	Survey of Native American Literature	3
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F or ETHS 153HF	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F) Honors Chicana-o and Latina-o Contemporary Issues	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History	3
ETHS 202 F	Race, Ethnicity and Pop Culture	3
ETHS 235 F or ETHS 235HF	Contemporary Social Justice Movements Honors Contemporary Social Justice	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Summarize the key terminology, theoretical orientations, principles and methods used in the field of American Indian & Indigenous Studies.

**Outcome 2:** Identify and explain historical trends and common themes in American Indian and Indigenous history.

**Outcome 3:** Construct a coherent and well-informed viewpoint about contemporary issues affecting Indigenous peoples in North America.

## Asian/Pacific Islander American Studies Associate in Arts Degree

Division: Social Sciences

### Requirements

PROGRAM CODE: 2A40548

The **Asian/Pacific Islander American Studies Associate in Arts Degree** is designed to provide students a holistic and transdisciplinary education with a focus on the historical and contemporary experiences of Asian Americans and Pacific Islanders in the United States and across the global diaspora. APIA Studies is committed to critical theorizations of race, ethnicity, class, gender, and sexuality and to the interrogation of interlocking systems of oppression in order to unsettle and disrupt

them. APIA Studies cultivates activist-scholars by providing students opportunities to bridge academic study with community engagement.

Graduates develop a liberatory vision for social change and acquire skills in community-centered leadership, media literacy, critical and creative thinking, and an ability to advance social justice for Asian Americans, Pacific Islanders, and API diasporic communities.

The major prepares students for transfer and career pathways that serve APIA populations in areas/fields such as education and research, community advocacy, union organizing, city planning and housing development, health and human services, mediation and conflict resolution, marketing and communications, law and policy, fine and performing arts, multicultural affairs, and more. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
ETHS 101 F or ETHS 101HF	American Ethnic Studies Honors American Ethnic Studies	3
ETHS 111 F	Women of Color in the U.S.	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History	3
<b>Restricted Electives (6 units):</b>		
ART 212 F	Art History - The Art of Asia	3
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F or ETHS 153HF	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F) Honors Chicana-o and Latina-o Contemporary Issues	3
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 202 F	Race, Ethnicity and Pop Culture	3
ETHS 235 F or ETHS 235HF	Contemporary Social Justice Movements Honors Contemporary Social Justice	3
HIST 160 F or HIST 161 F	Asian Civilizations I (formerly HIST 160AF) Asian Civilizations II (formerly HIST 160BF)	3
PHIL 270 F	Introduction to Asian Religions	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Summarize the key terminology, theoretical orientations, principles and methods used in the field of Asian/Pacific Islander American Studies.

**Outcome 2:** Identify and explain historical trends and common themes in Asian/Pacific Islander American history.

**Outcome 3:** Identify the cultural, political and socioeconomic heterogeneity that exists within and between Asian American and Pacific Islander communities.

## Chicana and Latinx Studies Associate in Arts Degree

Division: Social Sciences

### Requirements

PROGRAM CODE: 2A16767

The **Chicana and Latinx Studies Associate in Arts Degree (formerly Chicana/o Studies Associate in Arts Degree)** is designed to provide students a holistic and transdisciplinary education with a focus on the historical and contemporary experiences of Chicanxs and Latinxs in the United States and across the global diaspora. Chicana/Latinx Studies (CLS) is committed to critical theorizations of race, ethnicity, class, gender, and sexuality and to the interrogation of interlocking systems of oppression in order to unsettle and disrupt them. CLS cultivates activist-scholars by providing students opportunities to bridge academic study with community engagement. Graduates develop a liberatory vision for social change and acquire skills in community-centered leadership, media literacy, critical and creative thinking, and an ability to advance social justice movements for Chicanxs and Latinxs. The major prepares students for transfer and career pathways that serve Chicana and Latinx populations in areas/fields such as education and research, community advocacy, union organizing, city planning and housing development, health and human services, mediation and conflict resolution, marketing and communications, law and policy, visual and performing arts, multicultural affairs, and more. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
ETHS 101 F or ETHS 101HF	American Ethnic Studies Honors American Ethnic Studies	3
ETHS 111 F	Women of Color in the U.S.	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 153 F or ETHS 153HF	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F) Honors Chicana-o and Latina-o Contemporary Issues	3
<b>Restricted Electives (6 units):</b>		
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History	3
ETHS 202 F	Race, Ethnicity and Pop Culture	3
ETHS 235 F	Contemporary Social Justice Movements	3

or ETHS 235HF	Honors Contemporary Social Justice	
ANTH 209 F or ANTH 209 F	Cultures of Latin America Cultures of Latin America	3
ART 116 F	Art History - The Art of Mexico	3
ART 213 F	Art History: Pre-Columbian Art	3
ENGL 249 F	Survey of Chicano/a Literature	3
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3
HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
JOUR 271 F	Introduction to Spanish-Language Reporting	3
SPAN 206 F	Introduction to Latin American Literature	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Summarize the key terminology, theoretical orientations, principles and methods used in the field of Chicana and Latinx Studies.

**Outcome 2:** Identify and explain historical trends and common themes in Chicana history.

**Outcome 3:** Identify the cultural, political and socioeconomic heterogeneity that exists within and between Latinx communities.

## Ethnic Studies Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03881

The **Ethnic Studies Associate in Arts Degree** is designed to provide students a holistic and trans-disciplinary education with a focus on the historical and contemporary relational experiences of Black, Indigenous, and People of Color (BIPOC) in the United States. Ethnic Studies is committed to critical theorizations of race, racism, and white supremacy as foundational elements of modern social formations. Through an intersectional analysis, students examine ethnicity, class, gender, and sexuality and interrogate interlocking systems of oppression in order to unsettle and disrupt them.

Ethnic Studies cultivates activist-scholars by providing students opportunities to bridge academic study with community engagement. Graduates develop a liberatory vision for social change and acquire skills in community-centered leadership, media literacy, critical and creative thinking, and an ability to advance social justice for BIPOC. The major prepares students for transfer and career pathways that serve BIPOC populations in areas/fields such as education and research, community advocacy, union organizing, city planning and housing development, health and human services, mediation and conflict resolution, marketing and communications, law and policy, fine and performing arts, multicultural affairs, and more. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
ETHS 101 F or ETHS 101HF	American Ethnic Studies Honors American Ethnic Studies	3
ETHS 111 F	Women of Color in the U.S.	3



ETHS 202 F	Race, Ethnicity and Pop Culture	3
ETHS 235 F	Contemporary Social Justice Movements	3
or ETHS 235HF	Honors Contemporary Social Justice	
<b>Restricted Electives - Select courses from two different sub-fields (6 units):</b>		<b>6</b>
<i>SUB-FIELD I: Africana Studies</i>		
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
<i>SUB-FIELD II: Chicana/Latinx Studies</i>		
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	
<i>SUB-FIELD III: American Indian and Indigenous Studies</i>		
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
<i>SUB-FIELD IV: Asian/Pacific Islander American Studies</i>		
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Summarize the key terminology, theoretical orientations, principles and methods used in the field of Ethnic Studies.

**Outcome 2:** Identify and explain historical trends and common themes in ethnic history from the pre-Colonial era to the present.

**Outcome 3:** Analyze and interpret contemporary issues and topics affecting Black, Indigenous and People of Color in the U.S. utilizing Ethnic Studies frameworks.

## Fashion

Division: Technology and Engineering

### Faculty

Rachel Nevarez  
Renee Young

### Degrees and Certificates

- Advanced Fashion Design Certificate (p. 340)
- Dressmaking-Alterations Certificate (p. 341)
- Fashion Design Associate in Arts Degree (p. 341)
- Fashion Design Certificate (p. 341)
- Fashion Illustration Certificate (p. 342)
- Fashion Journalism Associate in Arts Degree (p. 342)
- Fashion Merchandising Associate in Arts Degree (p. 343)

- Fashion Merchandising Certificate (p. 343)
- Fashion Skills Certificate (p. 343)
- Image Consultant Certificate (p. 344)
- Patternmaker Certificate (p. 344)
- Product Development for Apparel Industries Certificate (p. 344)
- Textiles and Clothing Associate in Arts Degree (p. 345)

## Courses

### FASH 010 F Clothing Construction Studio **1 Unit**

**Corequisite(s):** FASH 101 F with a grade of C or better. Pass/No Pass only. 54 hours lab per term. This course provides supervised open lab time for students to develop clothing construction, patternmaking and design skills by working on individualized projects.

### FASH 045 F Swim and Active Wear **2 Units**

**Prerequisite(s):** FASH 101 F with a grade of Pass. 18 hours lecture and 54 hours lab per term. In this course, students will learn the techniques needed to create commercial quality swimwear and active wear using both industrial and home sewing equipment by apparel industry techniques. (Degree Credit)

### FASH 050 F Careers in Fashion **1 Unit**

Letter Grade or Pass/No Pass option. 18 hours lecture per term. This course is an introduction to a variety of career opportunities in designing or creating clothing. Personal qualities and skills needed for various career choices as well as the responsibilities, tools, and working environment will be covered for retailing, apparel manufacturing, couture, wardrobe consulting, theatrical, and entrepreneurial fields. (Degree Credit)

### FASH 060 F Professional Image **2 Units**

Letter Grade or Pass/No Pass option. 36 hours lecture per term. This course will teach students the skills needed to get a job, develop a strong work ethic, become a valuable employee, and how to dress in a professional manner. The subject areas covered are: time management, goal setting, interview skills, wardrobe planning, personal appearance for men and women, developing skills to work well with others, problem solving, professional etiquette, and self-promotion. (Degree Credit)

### FASH 082 F Beginning Designing and Sewing Leather (formerly FASH 080AF) **2 Units**

**Prerequisite(s):** FASH 201 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. In this course, the students will learn the skills and techniques needed to design and sew fashionable apparel and accessories of leather and suede.

### FASH 085 F Bridal and Special Occasion Wear **2 Units**

**Prerequisite(s):** FASH 201 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course covers specialized advanced construction techniques used in the manipulation of special and veil fabrics. The construction of advanced under-support techniques for bridal and special occasion wear will be discussed. The resources for these fabrics, notions and embellishments used in the assembly of special occasion wear will also be included. (Degree Credit)

### FASH 088 F CAD for Apparel **2 Units**

**Prerequisite(s):** FASH 186 F and FASH 284 F, with a grade of C or better. 18 hours lecture and 54 hours lab per term. In this course, students will use computer aided design (CAD) software as used in the fashion industry. The development of technical packages including garment construction specs, design and fashion illustrating (Degree Credit)

- FASH 090 F Creative Serging - Overlock Machine** **2 Units**  
18 hours lecture and 54 hours lab per term. This course will cover basic operation, care and use of serger machines. Students will learn about the various types, features, accessories, tools and notions necessary for applications in constructing serged projects. (Degree Credit)
- FASH 093 F Pattern Alteration and Fitting** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, the students will learn how to alter ready-made garments. The students will analyze properly and improperly fitted garments. This course provides instruction on altering commercial patterns to body measurements and making basic patterns to be used as basic blocks for adjusting styles and designing clothing.
- FASH 096 F Exploring a Fashion E-Commerce Home-Based Business (formerly Exploring a Home-Based Business)** **2 Units**  
36 hours lecture per term. This course explores the feasibility of using skills to produce income at home, and investigates the organization and management needed for a home-based business. Personal, financial, and management considerations are included. (Degree Credit)
- FASH 101 F Basic Sewing Techniques (formerly Clothing I)** **2 Units**  
Pass/No Pass only. 18 hours lecture and 54 hours lab per term. This course is designed for the beginning sewer. Basic clothing construction techniques used in the apparel industry. Appropriate methods for quality construction using a variety of fabrics. This course will include custom and speed techniques for developing skills in clothing construction, various techniques for obtaining perfect fit of a garment plus professional methods for constructing clothes. (CSU) (Degree Credit)
- FASH 107 F Apparel Analysis** **3 Units**  
54 hours lecture per term. This course will study the psychological and sociological significance of clothing and apply the principles and elements of design in the selection of clothing to enhance the individual. (CSU) (Degree Credit)
- FASH 108 F Flat Pattern Methods and Design I (formerly FASH 108AF)** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, students will learn to design and make garments by apparel industry techniques by manipulating paper patterns, thereby translating a designers sketch or concept into a marketable garment. (CSU) (Degree Credit)
- FASH 109 F Flat Pattern Methods and Design II (formerly FASH 108BF)** **2 Units**  
*Prerequisite(s):* FASH 108 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. In this course, students will make patterns for apparel using basic techniques learned in FASH 108 F and adding more advanced concepts for creating wearable clothing. (CSU) (Degree Credit)
- FASH 110 F Flat Pattern Methods and Design III (formerly FASH 108CF)** **2 Units**  
*Prerequisite(s):* FASH 109 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course will cover the development of patterns on the computer for fashion forward apparel using techniques learned in FASH 109 F, adding more advanced concepts. (CSU) (Degree Credit)
- FASH 145 F Field Studies in Fashion** **1 Unit**  
18 hours lecture per term. This course will acquaint students with the world of fashion through field trips to manufacturers, designers, the wholesale mart, and retail store, museum, or trade publication, different types of retail stores, museums, fashion publications and fashion shows. (CSU) (Degree Credit)
- FASH 150 F Introduction to the Fashion Industry** **3 Units**  
54 hours lecture per term. This course explores four levels of the fashion industry including the development of fashion, fashion designers, apparel producers, retailers, and fiber and fabric producers. (CSU) (Degree Credit)
- FASH 152 F Ready-to-Wear Evaluation** **3 Units**  
54 hours lecture per term. This course focuses on analyzing and evaluating the construction, appearance, pricing, sizing and fit of ready-to-wear and of price and quality indicators for selected accessories. Terminology associated with construction, production, and apparel styles will be included. (Degree Credit) (CSU)
- FASH 183 F Fashion Marketing** **3 Units**  
*Prerequisite(s):* FASH 150 F with a grade of C or better.  
54 hours lecture per term. This course will cover the principles behind consumer buying habits. Emphasis is placed on understanding consumer behavior as it relates to the marketing concept of the retailer. (CSU) (Degree Credit)
- FASH 186 F Workroom Sketching** **2 Units**  
18 hours lecture and 54 hours lab per term. In this course, the students will learn drawing techniques for garment workroom sketches. Included will be emphasis on developing skills in sketching garments with complete seam and embellishment details in the desired scale for use in the workroom of a manufacturer or custom shop. Drawing ability not necessary.
- FASH 188 F Apparel Production** **2 Units**  
*Prerequisite(s):* FASH 050 F and FASH 108 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. In this course, students will learn to become familiar with one of the major segments of the fashion industry. By learning the manufacturing sequence and production of pattern layout, cutting techniques, operating power machines, quality control, sorting, labeling, costing, and sourcing students will be prepared for a job as a production assistant of a design room assistant in an apparel factory. (CSU) (Degree Credit)
- FASH 190 F Pattern Grading** **2 Units**  
*Prerequisite(s):* FASH 108 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course teaches students to "size up" and "size down" a fashion pattern for all size ranges in misses, women's, junior, children, and men's wear using commercial industry techniques.
- FASH 196 F Domestic and International Fashion Studies** **2.5 Units**  
Pass/No Pass only. 45 hours lecture and 9 hours lab per term. This course is designed to introduce the domestic and international fashion industry to the student of American fashion. Class members will tour selected fashion manufacturers, textile mills, museums, and leading department stores in Europe, typical shops, and museums in the U.S. This course offers specialized sightseeing to the cultural centers of the host cities. (CSU) (Degree Credit)
- FASH 199 F Fashion Independent Study** **1 or 2 Units**  
54-108 hours of independent study per term. This course is designed for advanced students who wish to increase their knowledge of fashion through individual study. Projects must have instructor approval prior to enrollment. At the completion of the project, a written report is required. Students will schedule conferences with the instructor. (CSU) (UC review required.) (Degree Credit)

- FASH 201 F Fashion Sewing (formerly Clothing II)** **2 Units**  
**Prerequisite(s):** FASH 101 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course develops the development of intermediate skills in clothing construction. Included in this course is custom couture techniques, the use of special fabrics such as plaids, lace, sheers, and pile fabrics. Methods of individualizing clothing with structural and applied designs such as piping, quilting and applique explored. (CSU) (Degree Credit)
- FASH 202 F Display and Visual Merchandising (formerly Visual Merchandising)** **2 Units**  
 18 hours lecture and 54 hours lab per term. This course covers the role of display merchandising principles and design principles that are used to create retail displays. The care and handling of equipment will be discussed and demonstrated. Students will practice display techniques with windows and showcases and learn to develop a visual merchandising presentation. (CSU) (Degree Credit)
- FASH 205 F Tailoring (formerly FASH 205AF)** **2 Units**  
**Prerequisite(s):** FASH 201 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course presents contemporary and traditional custom tailoring techniques and industry techniques for producing women's and men's tailored garments such as suits and coats. Student constructs a line jacket or coat. (CSU) (Degree Credit)
- FASH 206 F Textiles** **4 Units**  
 54 hours lecture and 54 hours lab per term. This course surveys and studies fabrics used in clothing and interior design. It covers the study of fibers from production through fabric manufacturing and finishing. Emphasis is placed on performance use, care, and suitability for various end uses. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- FASH 209 F Draping (formerly FASH 209AF)** **2 Units**  
 18 hours lecture and 54 hours lab per term. In this course, students will learn to manipulate fabrics on a dress form to create designs without the use of drafter pattern. An exploration of the many possibilities of draping will be made using a variety of fabrics. (CSU) (Degree Credit)
- FASH 211 F Draping - Advanced (formerly FASH 209BF)** **2 Units**  
**Prerequisite(s):** FASH 209 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. In this course, students will learn advanced techniques on the manipulation of fabrics on a dress form to create designs without the use of drafted pattern. An exploration of the many possibilities of advanced draping will be made using a variety of fabrics. (CSU) (Degree Credit)
- FASH 220 F Retail and Fashion Buying** **3 Units**  
 54 hours lecture per term. This course offers a study of the principles of merchandise buying for resale in independent stores, major department stores, chain stores and centralized buying. This course will cover retail-buying principles for fashion merchandise, staples and soft merchandise lines. The lecture topics covered are: consumer motivation, merchandise planning and selection, sourcing, legal and trade regulation pricing, vendor relations, pricing analysis, classification systems, merchandise management and control, plus career opportunities. Field trips may be required outside of class times. (Degree Credit) (CSU)
- FASH 221 F Advanced Retail and Fashion Buying** **3 Units**  
**Prerequisite(s):** FASH 220 F with a grade of C or better  
 54 hours lecture per term. This course will prepare students in advanced concepts and principles of buying and merchandising fashion goods. This course expands on retail merchandising calculations and analysis for fashion apparel buying. (CSU) (Degree Credit)
- FASH 240 F Introduction to Fashion Styling and Current Topics in Fashion** **2 Units**  
**Prerequisite(s):** FASH 150 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This introduction course covers fashion styling, current topics related to fashion, fashion social media, communication, public relations, journalism, photography, current topics and make-up. This course will explore all of these subjects and how they are linked to creating an image and ultimately selling fashion. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)
- FASH 242 F Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)** **3 Units**  
 54 hours lecture per term. This course surveys the evolution of western and non-western clothing styles as a reflection of culture throughout history from Egyptian to Contemporary periods. Emphasis is placed on the relation of recurring styles to contemporary fashion; and the effect of socio-psychological, economic and political/religious influences on dress in historical perspective. (CSU) (Degree Credit)
- FASH 244 F Ethnic Costume** **3 Units**  
 Letter Grade or Pass/No Pass option. 54 hours lecture per term. This course is a survey of clothing worn as the national dress and daily wear of the indigenous peoples and the apparel of religious cultures in the developed and underdeveloped areas of the world and in the United States. Emphasis is on its influence on contemporary clothing. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) AA GE
- FASH 250 F Fashion Promotion** **3 Units**  
**Prerequisite(s):** FASH 150 F with a grade of C or better.  
 54 hours lecture per term. This course provides an analysis of sales promotion activities of fashion retailers and manufacturers. Topics include marketing communications, promotional strategies, fashion show production, and special event planning for promotion that leads to sales. (CSU) (Degree Credit)
- FASH 255 F Advanced Clothing Construction - Industrial** **2 Units**  
**Prerequisite(s):** FASH 101 F and FASH 201 F, with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course is an advanced course of sewing clothing construction methods. Emphasis is on industrial equipment used in the mass production of sample garments. In this course, the student will produce sample garments using industrial construction methods while working on industrial equipment. Included is overlock, buttonhole and cover stitch machines; the use and care. (CSU) (Degree Credit)
- FASH 260 F Fashion Forecasting** **2 Units**  
 18 hours lecture and 54 hours lab per term. In this course, the students will study the techniques and procedures for identifying and forecasting current fashion trends. Students will learn to understand the role of the fashion forecaster and how to detect those trends which may look to make another appearance, as well as any new trends which may be about to emerge. Included in this course will be the viewing of trend forecasting services. (CSU) (Degree Credit)
- FASH 284 F Fashion Design (formerly FASH 284AF)** **2 Units**  
 18 hours lecture and 54 hours lab per term. In this course, students will learn the application of design principles and elements to contemporary fashion for ready-to-wear and couture and how to make it marketable. Class work will require garment sketching. Current fashion trends and resources for design ideas will be explored. (CSU) (Degree Credit)

**FASH 285 F Fashion Design - Advanced (formerly FASH 284BF) 2 Units****Prerequisite(s):** FASH 284 F with a grade of C or better.

18 hours lecture and 54 hours lab per term. This course explores the design principles and elements to contemporary fashion. The lectures cover design problems encountered in the ready-to-wear and couture garment industries. Classwork will require garment sketching. Current fashion trends, sourcing and resources for design ideas will be explored. (CSU) (Degree Credit)

**FASH 288 F Advanced CAD for Apparel-Fashion Illustration and Digital Flats 2 Units****Prerequisite(s):** FASH 088 F with a grade of C or better

18 hours lecture and 54 hours lab per term. In this course, students will apply advanced applications of fashion illustration and technical flat techniques using Adobe Illustrator. This course includes fabric and textile rendering, repeats, graphic placements, patterns and design details. A variety of computer word processing frequently used in the fashion industry. Microsoft Word, Excel, In Design and Adobe Photoshop will be explored. (CSU) (Degree Credit)

**FASH 297 F Fashion Design Portfolio 2 Units****Prerequisite(s):** FASH 088 F, FASH 108 F, FASH 109 F, FASH 209 F and FASH 284 F with a grade of C or better

18 hours lecture and 54 hours lab per term. In this course, students will learn to develop a design portfolio. Students will develop and refine their individual style by the development of a fashion portfolio containing original design work, fashion illustrations, flats and photographs. Included are look books and digital portfolio using various media. (CSU) (Degree Credit)

**FASH 299 F Fashion Industry Internship 2-4 Units****Prerequisite(s):** For Design Majors: FASH 109 F and FASH 209 F and

FASH 284 F, with a grade of C or better OR for Merchandise Majors: FASH 150 F and FASH 220 F and FASH 250 F, with a grade of C or better. 18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through internships/employment in with a garment manufacturer or retailer or one of the related businesses in the fashion industry. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (Degree Credit) (CSU)

**FASH 975 F Patternmaking: Collections 2 Units****Prerequisite(s):** FASH 108 F and FASH 109 F and FASH 209 F and FASH 284 F, with a grade of C or better

18 hours lecture and 54 hours lab per term. In this course, students will make patterns for apparel using basic will apply design principles to contemporary fashion by designing and producing a group of coordinated garments which will be included in a runway fashion show or digital look book. Field trips may be required outside of class time. (Degree Credit)

**FASH 976 F Men's Patternmaking 2 Units****Prerequisite(s):** FASH 108 F with a grade of C or better.

18 hours lecture and 54 hours lab per term. In this course, students will make patterns for men's apparel using basic blocks. The students will apply design principles to contemporary fashion by creating men's patterns and producing a group of men's coordinated garments which will be included in a runway fashion show, digital look book or fashion event. (Degree Credit)

## Advanced Fashion Design Certificate Requirements

**PROGRAM CODE:** 2C36787

The **Advanced Fashion Design Certificate Program** is designed to prepare students for a career as a fashion design room assistant or an assistant designer. The Advanced Fashion Design Certificate provides the student with advanced training in digital computer in designing, patternmaking and the mass production of apparel domestically and overseas. The course of study gives the students the current skills leading to certification and employment in the apparel industry. This certificate requires a total of 62-67 units. The student is required to complete the Fashion Design Certificate (37-42 units) plus the Advanced Fashion Design Certificate requirements of 25 units

Code	Title	Units
<b>Fashion Design Certificate Required Courses (34-36 units):</b>		
FASH 050 F	Careers in Fashion	1
FASH 088 F	CAD for Apparel	2
FASH 093 F	Pattern Alteration and Fitting	2
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 107 F	Apparel Analysis	3
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 109 F	Flat Pattern Methods and Design II (formerly FASH 108BF)	2
FASH 150 F	Introduction to the Fashion Industry	3
FASH 186 F	Workroom Sketching	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 206 F	Textiles	4
FASH 209 F	Draping (formerly FASH 209AF)	2
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
FASH 284 F	Fashion Design (formerly FASH 284AF)	2
FASH 299 F	Fashion Industry Internship	2-4
<b>Fashion Design Certificate Restricted Electives (4-6 units): 4-6</b>		
ART 186 F	Beginning Life Drawing	3
FASH 060 F	Professional Image	2
FASH 145 F	Field Studies in Fashion	1
FASH 152 F	Ready-to-Wear Evaluation	3
FASH 244 F	Ethnic Costume	3
FASH 260 F	Fashion Forecasting	2
<b>Required Courses (21 units):</b>		
ART 139 F	Fashion Sketching	2
FASH 110 F	Flat Pattern Methods and Design III (formerly FASH 108CF)	2
FASH 183 F	Fashion Marketing	3
FASH 190 F	Pattern Grading	2
FASH 211 F	Draping - Advanced (formerly FASH 209BF)	2
FASH 255 F	Advanced Clothing Construction - Industrial	2
FASH 285 F	Fashion Design - Advanced (formerly FASH 284BF)	2

FASH 288 F	Advanced CAD for Apparel-Fashion Illustration and Digital Flats	2
FASH 297 F	Fashion Design Portfolio	2
FASH 975 F	Patternmaking: Collections	2
<b>Restricted Electives (4 units):</b>		<b>4</b>
FASH 045 F	Swim and Active Wear	2
FASH 085 F	Bridal and Special Occasion Wear	2
FASH 090 F	Creative Serging - Overlock Machine	2
FASH 976 F	Men's Patternmaking	2
<b>Total Units</b>		<b>63-67</b>

## Program Student Learning Outcomes

**Outcome 1:** Assemble to create an employment portfolio for entry-level employment in the fashion apparel industry as a fashion design room assistant or an assistant designer.

**Outcome 2:** Create a fashion trend booklet on one fashion category.

## Dressmaking-Alterations Certificate

### Requirements

PROGRAM CODE: 2C08428

The **Dressmaking-Alterations Certificate** prepares students for entry-level employment as a professional in the fields of dressmaker, garment construction, and fit and alterations specialist. This certificate requires students to complete 36 units of required courses.

Code	Title	Units
<b>Required Courses (36 units):</b>		
FASH 060 F	Professional Image	2
FASH 085 F	Bridal and Special Occasion Wear	2
FASH 093 F	Pattern Alteration and Fitting	2
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 109 F	Flat Pattern Methods and Design II (formerly FASH 108BF)	2
FASH 145 F	Field Studies in Fashion	1
FASH 150 F	Introduction to the Fashion Industry	3
FASH 152 F	Ready-to-Wear Evaluation	3
FASH 186 F	Workroom Sketching	2
FASH 188 F	Apparel Production	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 206 F	Textiles	4
FASH 209 F	Draping (formerly FASH 209AF)	2
FASH 255 F	Advanced Clothing Construction - Industrial	2
PSY 110 F	Introduction to Applied Psychology	3
<b>Total Units</b>		<b>36</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate the skills and complete the necessary requirements for certification for employment in dressmaking and alterations field.

**Outcome 2:** Alter a commercial sewing pattern to fit defined body measurements.

**Outcome 3:** Create a garment from fitting a muslin on an individual missy body.

## Fashion Design Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03862

The **Fashion Design Associate in Arts Degree** is designed to provide the student with a course of study leading to employment in the fashion apparel industry as an Assistant Designer. The Assistant Designer should be able to design and illustrate collections and create patterns manually on the computer. This degree requires completion of 24 units of required courses.

Code	Title	Units
<b>Required Courses (24 units):</b>		
FASH 088 F	CAD for Apparel	2
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 109 F	Flat Pattern Methods and Design II (formerly FASH 108BF)	2
FASH 110 F	Flat Pattern Methods and Design III (formerly FASH 108CF)	2
FASH 150 F	Introduction to the Fashion Industry	3
FASH 186 F	Workroom Sketching	2
FASH 188 F	Apparel Production	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 206 F	Textiles	4
FASH 284 F	Fashion Design (formerly FASH 284AF)	2
FASH 299 F	Fashion Industry Internship	2-4
<b>Total Units</b>		<b>25-27</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify the basic fashion design principles and qualifications necessary for entry level employment with fashion manufacturers.

**Outcome 2:** Create a 5-piece outfit with five different patterns on the computer.

## Fashion Design Certificate

### Requirements

PROGRAM CODE: 2C21273

The **Fashion Design Certificate Program** is designed to provide a course of study that prepares students for entry-level employment as a professional and competent in the field of the fashion apparel industry as a worker in the design room or equivalent. Individuals with this certificate are able to design, build a apparel line, illustrate by hand and on the computer garments, alter patterns, and create patterns manually as well as on the computer. This course of study brings the student deeper into the fashion

field. A grade of C or better is required in each course taken. This certificate requires the completion of 38-42 units.

Code	Title	Units
<b>Required Courses (34-36 units):</b>		
FASH 050 F	Careers in Fashion	1
FASH 088 F	CAD for Apparel	2
FASH 093 F	Pattern Alteration and Fitting	2
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 107 F	Apparel Analysis	3
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 109 F	Flat Pattern Methods and Design II (formerly FASH 108BF)	2
FASH 150 F	Introduction to the Fashion Industry	3
FASH 186 F	Workroom Sketching	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 206 F	Textiles	4
FASH 209 F	Draping (formerly FASH 209AF)	2
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
FASH 284 F	Fashion Design (formerly FASH 284AF)	2
FASH 299 F	Fashion Industry Internship	2-4
<b>Restricted Electives (4-6 units):</b>		
FASH 060 F	Professional Image	2
FASH 145 F	Field Studies in Fashion	1
FASH 152 F	Ready-to-Wear Evaluation	3
FASH 244 F	Ethnic Costume	3
FASH 260 F	Fashion Forecasting	2
<b>Total Units</b>		<b>38-42</b>

## Program Student Learning Outcomes

**Outcome 1:** Prepare a cost sheet for a defined seasonal heading in the apparel industry as a design worker in the design room.

**Outcome 2:** Demonstrate an understanding of the basic design principles.

## Fashion Illustration Certificate

### Requirements

PROGRAM CODE: 2C08427

The **Fashion Illustration Certificate** is designed to prepare students for employment in fashion illustration fields such as technical designer, textiles, model/croquis drawing, direct mail catalog and advertising. This certificate requires the completion of 35-37 units of which 28 are in required courses. An additional 7-9 units must be chosen from the restricted electives listed below. A grade of C or better is required for all courses.

Code	Title	Units
<b>Required Courses (28 units):</b>		
ART 118 F	Color Theory	3
ART 139 F	Fashion Sketching	2
ART 182 F	Basic Drawing	3

ART 186 F	Beginning Life Drawing	3
ART 244 F	Illustration	3
FASH 088 F	CAD for Apparel	2
FASH 150 F	Introduction to the Fashion Industry	3
FASH 186 F	Workroom Sketching	2
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
FASH 288 F	Advanced CAD for Apparel-Fashion Illustration and Digital Flats	2
FASH 297 F	Fashion Design Portfolio	2
<b>Restricted Electives (7-9 units):</b>		<b>7-9</b>
ART 188 F	Beginning Watercolor Painting	3
ART 236 F	Intermediate Life Drawing	3
FASH 050 F	Careers in Fashion	1
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
<b>Total Units</b>		<b>35-37</b>

## Program Student Learning Outcomes

**Outcome 1:** Illustrate the 10 head figure (croquis) and generate folds, pleats and gathers of clothing and complete the necessary requirements for certification for employment in fashion illustration.

**Outcome 2:** Illustrate a garment from their own creative ideas so that they can communicate a mental image to a viewer using a variety of drawing tools and assemble a portfolio for job interviews.

## Fashion Journalism Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03861

The **Fashion Journalism Associate in Arts Degree** is designed to provide a course of study that prepares students for entry-level employment as a professional and competent in fashion journalism fields as a fashion writer or equivalent. Individuals with this degree are able to work as a fashion editor and write for fashion magazines, trade magazines, newspapers, social media, and public relations. This degree requires 22-24 units in the major in addition to other graduation requirements.

Code	Title	Units
<b>Required Courses (22-24 units):</b>		
FASH 150 F	Introduction to the Fashion Industry	3
FASH 183 F	Fashion Marketing	3
FASH 250 F	Fashion Promotion	3
FASH 260 F	Fashion Forecasting	2
FASH 299 F	Fashion Industry Internship	2-4
JOUR 101 F	Reporting and Writing	3
JOUR 108 F	Feature Writing	3
JOUR 132 F	Introduction to Magazine Production	3
<b>Total Units</b>		<b>22-24</b>

## Program Student Learning Outcomes

**Outcome 1:** Compose and revise a fashion editorial with a compelling lead, adequate sourcing and context, clear transitions, and a strong title.

**Outcome 2:** Create original content for a fashion social media post aimed at a specific target market.

## Fashion Merchandising Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A08430

The **Fashion Merchandising Associate in Arts Degree** is designed to prepare students for employment in the ready-to-wear industry, department stores, specialty shops, and wholesale fashion showrooms. This degree requires a total of 22-23 units, of which 19 units are in required courses. An additional 3-4 units must be chosen from the restricted electives listed below

Code	Title	Units
<b>Required Courses (19 units):</b>		
FASH 107 F	Apparel Analysis	3
FASH 150 F	Introduction to the Fashion Industry	3
FASH 152 F	Ready-to-Wear Evaluation	3
FASH 206 F	Textiles	4
FASH 220 F	Retail and Fashion Buying	3
FASH 221 F	Advanced Retail and Fashion Buying	3
<b>Restricted Electives (3-4 units):</b>		<b>3-4</b>
BUS 151 F	Business Mathematics	3
BUS 267 F	Principles of Supervision	3
CIS 106 F	Beginning Spreadsheet (MS Excel)	3
FASH 145 F	Field Studies in Fashion	1
FASH 183 F	Fashion Marketing	3
FASH 250 F	Fashion Promotion	3
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
<b>Total Units</b>		<b>22-23</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate the skills and qualifications necessary for entry-level employment with the fashion retail industry.

**Outcome 2:** Create an excel spreadsheet "open-to-buy" data..

## Fashion Merchandising Certificate

### Requirements

PROGRAM CODE: 2C21274A

The **Fashion Merchandising Certificate** is designed to provide a course of study that prepares students for entry-employment as a professional and competent in fashion merchandising fields such as fashion merchandiser, fashion apparel buyer, visual merchandiser, and fashion sales representative. Individuals with this certificate are able to know how to sell and market apparel, merchandise apparel lines, and visually

showcase apparel in all aspect from digital to brick and mortar stores. A grade of C or better is required in each course taken. The Fashion Merchandising Certificate requires the completion of 35-39 units.

Code	Title	Units
<b>Required Courses (31-33 units):</b>		
BUS 131 F	Principles of International Business	3
FASH 107 F	Apparel Analysis	3
FASH 145 F	Field Studies in Fashion	1
FASH 150 F	Introduction to the Fashion Industry	3
FASH 152 F	Ready-to-Wear Evaluation	3
FASH 183 F	Fashion Marketing	3
FASH 206 F	Textiles	4
FASH 220 F	Retail and Fashion Buying	3
FASH 221 F	Advanced Retail and Fashion Buying	3
FASH 250 F	Fashion Promotion	3
FASH 299 F	Fashion Industry Internship	2-4
<b>Restricted Electives (4-6 units):</b>		<b>4-6</b>
BUS 132 F	Principles of Import and Export	3
FASH 050 F	Careers in Fashion	1
FASH 060 F	Professional Image	2
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
FASH 297 F	Fashion Design Portfolio	2
<b>Total Units</b>		<b>35-39</b>

## Program Student Learning Outcomes

**Outcome 1:** Define and discuss the role of the retail fashion buyer in today's retail environment and complete the necessary requirements for certification for employment in fashion merchandise.

**Outcome 2:** Evaluate consumer behavior in the fashion business.

## Fashion Skills Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C41219

The **Fashion Skills Certificate** is designed to provide the student with a course of study leading to fast employment in the fashion apparel industry. This skills certificate requires 9 units, all of which are required courses. A grade of C or better is required for each course taken. This certificate requires 9 units.

Code	Title	Units
<b>Required Courses (9 units):</b>		
FASH 088 F	CAD for Apparel	2
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 109 F	Flat Pattern Methods and Design II (formerly FASH 108BF)	2
FASH 110 F	Flat Pattern Methods and Design III (formerly FASH 108CF)	2

FASH 145 F	Field Studies in Fashion	1
<b>Total Units</b>		<b>9</b>

## Program Student Learning Outcomes

**Outcome 1:** Create a ten-page technical package for an apparel line.

**Outcome 2:** Create a five-piece outfit with five different patterns on the computer.

## Image Consultant Certificate

### Requirements

PROGRAM CODE: 2C08429A

The **Image Consultant Certificate Program** prepares students for a career as a professional wardrobe and color consultant. This certificate requires completion of 32-35 units of which 28 units are in required courses and 4-7 units must be chosen from the restricted electives.

Code	Title	Units
<b>Required Courses (28 units):</b>		
ART 118 F	Color Theory	3
FASH 050 F	Careers in Fashion	1
FASH 060 F	Professional Image	2
FASH 107 F	Apparel Analysis	3
FASH 145 F	Field Studies in Fashion	1
FASH 150 F	Introduction to the Fashion Industry	3
FASH 183 F	Fashion Marketing	3
FASH 186 F	Workroom Sketching	2
FASH 206 F	Textiles	4
FASH 250 F	Fashion Promotion	3
PSY 101 F	General Psychology	3
<b>Restricted Electives (4-7 units):</b>		<b>4-7</b>
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
FASH 096 F	Exploring a Fashion E-Commerce Home-Based Business (formerly Exploring a Home-Based Business)	2
FASH 152 F	Ready-to-Wear Evaluation	3
IDES 130 F	Applied Color and Design Theory	4
<b>Total Units</b>		<b>32-35</b>

## Program Student Learning Outcomes

**Outcome 1:** Compare and contrast the practices used to promote fashion apparel.

**Outcome 2:** Create an image consultant portfolio for entry-level employment with major retailers, image consulting firms, or self-employment.

**Outcome 3:** List a personal code of professional ethics.

## Patternmaker Certificate

### Requirements

PROGRAM CODE: 2C36687A

The **Patternmaker Certificate** is designed to prepare students for an entry level position as a patternmaker in the apparel manufacturing industry. This certificate requires a total of 26-28 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (22 units):</b>		
FASH 093 F	Pattern Alteration and Fitting	2
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 109 F	Flat Pattern Methods and Design II (formerly FASH 108BF)	2
FASH 110 F	Flat Pattern Methods and Design III (formerly FASH 108CF)	2
FASH 188 F	Apparel Production	2
FASH 190 F	Pattern Grading	2
FASH 206 F	Textiles	4
FASH 209 F	Draping (formerly FASH 209AF)	2
FASH 975 F	Patternmaking: Collections	2
<b>Restricted Electives (4-6 units):</b>		<b>4-6</b>
FASH 090 F	Creative Serging - Overlock Machine	2
FASH 093 F	Pattern Alteration and Fitting	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 211 F	Draping - Advanced (formerly FASH 209BF)	2
FASH 299 F	Fashion Industry Internship	2-4
<b>Total Units</b>		<b>26-28</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate the ability to create different patterns manually and on the computer for employment as a first patternmaker in the fashion design industry.

**Outcome 2:** Produce graded "nests" to industry specifications.

## Product Development for Apparel Industries Certificate

### Requirements

PROGRAM CODE: 2C36664

The **Product Development for the Apparel Industries Certificate** is designed to prepare students to work in the fashion design or merchandising fields developing apparel designs and/or lines of apparel for specific target customers. This certificate requires a total of 33-37 units of which 29-31 units are in required courses. An additional 4-6 units must be chosen from the restricted units listed below.

Code	Title	Units
<b>Required Courses (28-30 units):</b>		
FASH 088 F	CAD for Apparel	2
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 107 F	Apparel Analysis	3



FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2	FASH 284 F	Fashion Design (formerly FASH 284AF)	2
FASH 109 F	Flat Pattern Methods and Design II (formerly FASH 108BF)	2	<b>Total Units</b>		<b>19</b>
FASH 145 F	Field Studies in Fashion	1	<b>Program Student Learning Outcomes</b>		
FASH 152 F	Ready-to-Wear Evaluation	3	<i><b>Outcome 1:</b> Demonstrate the ability of garment construction, alterations and qualifications necessary for entry level employment with fashion manufacturers.</i>		
FASH 186 F	Workroom Sketching	2	<i><b>Outcome 2:</b> Describe and compare two methods of printing.</i>		
FASH 188 F	Apparel Production	2	<i><b>Outcome 3:</b> Create a print/textile in CAD (currently Adobe Photoshop) and make a 4 way print with 2 colorways.</i>		
FASH 201 F	Fashion Sewing (formerly Clothing II)	2	<b>Foreign Language</b>		
FASH 284 F	Fashion Design (formerly FASH 284AF)	2	Division: Humanities		
FASH 297 F	Fashion Design Portfolio	2	<b>Faculty</b>		
FASH 299 F	Fashion Industry Internship	2-4	Lina Callahan		
FASH 975 F	Patternmaking: Collections	2	Klaus Hornell		
<b>Restricted Electives (4-6 units):</b>		<b>4-6</b>	Kelly Kim		
FASH 093 F	Pattern Alteration and Fitting	2	Edward Linggi		
FASH 110 F	Flat Pattern Methods and Design III (formerly FASH 108CF)	2	Noriko Oppenheim		
FASH 150 F	Introduction to the Fashion Industry	3	Catherine Reinhardt-Zacair		
FASH 183 F	Fashion Marketing	3			
FASH 285 F	Fashion Design - Advanced (formerly FASH 284BF)	2			
<b>Total Units</b>		<b>33-37</b>			

## Program Student Learning Outcomes

**Outcome 1:** Plan and execute the assembly of a garment, using various industrial machines within a prescribed amount of time and complete the necessary requirements for certification for entry-level employment.

**Outcome 2:** Evaluate the construction of Junior and Women's moderate market apparel.

## Textiles and Clothing Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A13210

The **Textiles and Clothing Associate in Arts Degree** is designed to prepare students for an entry level position as a textile assistant designer creating prints in CAD and/or the field of a Fit Specialist in garment construction and alterations. This degree requires the completion of 19 units of required courses.

Code	Title	Units
<b>Required Courses (19 units):</b>		
ART 118 F	Color Theory	3
FASH 085 F	Bridal and Special Occasion Wear	2
FASH 088 F	CAD for Apparel	2
FASH 093 F	Pattern Alteration and Fitting	2
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 206 F	Textiles	4

FASH 284 F	Fashion Design (formerly FASH 284AF)	2
<b>Total Units</b>		<b>19</b>

## Program Student Learning Outcomes

***Outcome 1:** Demonstrate the ability of garment construction, alterations and qualifications necessary for entry level employment with fashion manufacturers.*

***Outcome 2:** Describe and compare two methods of printing.*

***Outcome 3:** Create a print/textile in CAD (currently Adobe Photoshop) and make a 4 way print with 2 colorways.*

## Foreign Language

Division: Humanities

### Faculty

Lina Callahan  
Klaus Hornell  
Kelly Kim  
Edward Linggi  
Noriko Oppenheim  
Catherine Reinhardt-Zacair

## Degrees and Certificates

- Foreign Language Associate in Arts Degree (p. 348)

## Courses

**CHIN 101 F Elementary Chinese - Mandarin I** **5 Units**  
90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Chinese-speaking countries. This course is conducted primarily in Chinese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**CHIN 102 F Elementary Chinese - Mandarin II** **5 Units**  
**Prerequisite(s):** CHIN 101 F with a grade of C or better or Pass or one year of high school Chinese with a grade of C or better  
90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to achieve these skills. Included is an introduction to customs, culture, and civilization of Chinese-speaking countries. This course is conducted primarily in Chinese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**CHIN 203 F Intermediate Chinese - Mandarin III** **4 Units**  
**Prerequisite(s):** CHIN 102 F with a grade of C or better or Pass or two years of high school Chinese with a grade of C or better  
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing Chinese based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**CHIN 204 F Intermediate Chinese - Mandarin IV 4 Units**

**Prerequisite(s):** CHIN 203 F with a grade of C or better or Pass or three years of high school Chinese with a grade of C or better Letter Grade or Pass/No Pass option. 72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Chinese based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Chinese culture by introducing literary readings. This course is conducted entirely in Chinese. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**FREN 101 F Elementary French I 5 Units**

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of French-speaking countries. This course is conducted primarily in French and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**FREN 102 F Elementary French II 5 Units**

**Prerequisite(s):** FREN 101 F or one year of high school French with a grade of C or better. 90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of French-speaking countries. This course is conducted primarily in French and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**FREN 200 F Conversational French 2 Units**

**Prerequisite(s):** FREN 102 F with a grade of C or better or Pass or two years of high school French with a grade of C or better 36 hours lecture per term. This course will focus on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components are included. This course may be taken concurrently with FREN 203 F or FREN 204 F. This course will be conducted entirely in French. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**FREN 203 F Intermediate French III 4 Units**

**Prerequisite(s):** FREN 102 F with a grade of C or better or Pass or two years of high school French with a grade of C or better 72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing French based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**FREN 204 F Intermediate French IV 4 Units**

**Prerequisite(s):** FREN 203 F with a grade of Pass or C or better or three years of high school French with a grade of C or better 72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing French based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of French culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**GERM 101 F Elementary German I 5 Units**

90 hours per lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of German-speaking countries. This course is conducted primarily in German and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE

**GERM 102 F Elementary German II 5 Units**

**Prerequisite(s):** GERM 101 F with a grade of C or better or Pass or one year of high school German with a grade of C or better 90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of German-speaking countries. This course is conducted primarily in German and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**GERM 200 F Conversational German 2 Units**

**Prerequisite(s):** GERM 102 F with a grade of C or better or Pass or two years of high school German with a grade of C or better 36 hours lecture per term. This course will focus on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components will be included. This course may be taken concurrently with GERM 203 F or 204 F. Instruction will be conducted entirely in German. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU)

**GERM 203 F Intermediate German III 4 Units**

**Prerequisite(s):** GERM 102 F with a grade of Pass or C or better or two years of high school German with a grade of C or better 72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing German based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**GERM 204 F Intermediate German IV 4 Units**

**Prerequisite(s):** GERM 203 F with a grade of C or better or Pass or three years of high school German with a grade of C or better 72 hours of lecture per term. This course continues the development of listening and reading comprehension, speaking and writing German based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding of German culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ITAL 101 F Elementary Italian I 5 Units**

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Italy. This course is conducted primarily in Italian and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE

**ITAL 102 F Elementary Italian II****5 Units**

**Prerequisite(s):** ITAL 101 F with a grade of C or better or one year of high school Italian with a grade of C or better  
90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Italy. This course is conducted primarily in Italian and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ITAL 203 F Intermediate Italian III****4 Units**

**Prerequisite(s):** ITAL 102 F with a grade of C or better or Pass or two years of high school Italian with a grade of C or better  
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing Italian based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**ITAL 204 F Intermediate Italian IV****4 Units**

**Prerequisite(s):** ITAL 203 F with a grade of C or better or Pass or three years of high school Italian with a grade of C or better  
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Italian based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Italian culture by introducing literary readings. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**JAPN 101 F Elementary Japanese I****5 Units**

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Japanese-speaking countries. This course is conducted primarily in Japanese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**JAPN 102 F Elementary Japanese II****5 Units**

**Prerequisite(s):** JAPN 101 F with a grade of C or better or Pass or one year of high school Japanese with a grade of C or better.  
90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Japanese-speaking countries. This course is conducted primarily in Japanese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**JAPN 203 F Intermediate Japanese III****4 Units**

**Prerequisite(s):** JAPN 102 F with a grade of C or better or Pass or two years of high school Japanese with a grade of C or better  
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking, writing Japanese based on culture and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**JAPN 204 F Intermediate Japanese IV****4 Units**

**Prerequisite(s):** JAPN 203 F with a grade of C or better or Pass or three years of high school Japanese with a grade of C or better  
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Japanese based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Japanese culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PORT 101 F Elementary Portuguese I****5 Units**

90 hours lecture per term. The course focuses on the four major skills of language learning—listening comprehension, speaking, reading and writing—and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Brazil and other Portuguese-speaking countries. This course is conducted primarily in Brazilian Portuguese. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE.

**PORT 102 F Elementary Portuguese II****5 Units**

**Prerequisite(s):** PORT 101 F with a grade of C or better or Pass or one year of high school Portuguese with a grade of C or better  
90 hours lecture per term. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Portuguese-speaking countries. This course is conducted primarily in Brazilian Portuguese and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**SPAN 101 F Elementary Spanish I****5 Units**

90 hours lecture per term. This course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE (C-ID: SPAN 100)

**SPAN 101HF Honors Elementary Spanish I****5 Units**

90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. The course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE (C-ID: SPAN 100)

**SPAN 102 F Elementary Spanish II****5 Units**

**Prerequisite(s):** SPAN 101 F with a grade of C or better or Pass or SPAN 101HF with a grade of C or better or one year of high school Spanish with a grade of C or better

90 hours lecture per term. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 110)

**SPAN 102HF Honors Elementary Spanish II****5 Units**

**Prerequisite(s):** SPAN 101 F with a grade of C or better or Pass or SPAN 101HF with a grade of C or better or Pass or one year of high school Spanish with a grade of C or better

90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 110)

**SPAN 200 F Conversational Spanish****2 Units**

**Prerequisite(s):** SPAN 102 F with a grade of "C" or better or "Pass" or SPAN 102HF with a grade of "C" or better or two years of high school Spanish with a grade of "C" or better.

Letter Grade or Pass/No Pass option. 36 hours lecture per term. This course focuses on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components are included. This course may be taken concurrently with SPAN 203 F, 204 F, 205 F, and 206 F. Instruction will be conducted entirely in Spanish. (Degree Credit) (CSU)

**SPAN 201 F Spanish for the Spanish Speaker****5 Units**

**Advisory:** Native or near-native Spanish language proficiency.

90 hours lecture per term. This course is designed to improve the communicative skills in Spanish for bilingual students. Although the course addresses all four skills of language learning - listening comprehension, speaking, reading and writing - the emphasis of the course is to improve reading and writing skills in Spanish through the study of grammar, spelling, vocabulary and composition. Selective readings of Hispanic writers will be used to enhance knowledge of literature and culture. This class is conducted primarily in Spanish. Students that take either SPAN 101 F or SPAN 102 F or SPAN 203 (or all of these) may not receive credit for SPAN 201 F. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit, one course.) AA GE, CSU GE, IGETC

**SPAN 203 F Intermediate Spanish III****4 Units**

**Prerequisite(s):** SPAN 102 F with a grade of C or better or Pass or SPAN 102HF with a grade of C or better or Pass or two years of high school Spanish with a grade of C or better.

72 hours lecture per term. The course includes development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit, one course) AA GE, CSU GE, IGETC

**SPAN 204 F Intermediate Spanish IV****4 Units**

**Prerequisite(s):** SPAN 201 F or SPAN 203 F, with a grade of Pass or C or better or three years of high school Spanish with a grade of C or better.

72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Spanish and Latin American culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 210)

**SPAN 205 F Introduction to Spanish Literature****3 Units**

**Prerequisite(s):** SPAN 204 F with a grade of C or better or Pass or four years of high school Spanish with a grade of C or better

54 hours lecture per term. This survey course begins with the Middle Ages to the present covering history, culture and literary writings from Spain. The instruction is in Spanish. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**SPAN 206 F Introduction to Latin American Literature****3 Units**

**Prerequisite(s):** SPAN 204 F with a grade of C or better or Pass or four years of high school Spanish with a grade of C or better

54 hours lecture per term. This survey course begins with pre-Columbian literature to the present covering history, culture and literary writings from Latin American countries. The instruction is in Spanish. This course fulfills the Multicultural Education Requirement for graduation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**SPAN 207 F Children's Literature/Spanish****3 Units**

**Prerequisite(s):** SPAN 203 F with a grade of C or better or Pass

This is an introductory course in children's literature of Spanish-speaking countries and books for children and adolescents published in Spanish by Hispanic authors. The focus is on the genres that constitute Spanish children's literature, from its multiple origins in folklore to contemporary fiction, non-fiction, poetry, drama and picture books. The course enables students to identify representative and meritorious texts in Spanish that reflect the cultural background, interests, values and concerns of Spanish-speaking children. It also provides extensive practice in oral and written expression through analysis, discussion and interpretation of Hispanic literature and culture. This course is recommended for high-intermediate students, as well as teachers in K-12. This course is taught entirely in Spanish. (Degree Credit) (CSU) (UC) AA GE, CSU GE

## Foreign Language Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A03853

The **Foreign Language Associate in Arts Degree** requires a minimum of 18-19 units. Students may fulfill the 18-19 units requirement by completing the entire sequence (LANG 101 F, 102 F, 203 F, and 204 F) for a single foreign language. Some students may be placed into the language course sequence at a higher level than LANG 101 F. For example, according to the prerequisite policy, students who complete high school coursework with a grade of C or better may place out of some of the language sequence. However, these students are not awarded units for the courses out of which they placed. Such students must complete the 18-19 unit degree requirement by selecting the remaining units from the list of restricted electives.

Code	Title	Units
<b>Required Courses (18 units):</b>		
CHIN 101 F & CHIN 102 F & CHIN 203 F & CHIN 204 F OR	Elementary Chinese - Mandarin I and Elementary Chinese - Mandarin II and Intermediate Chinese - Mandarin III and Intermediate Chinese - Mandarin IV	18
FREN 101 F & FREN 102 F & FREN 203 F & FREN 204 F OR	Elementary French I and Elementary French II and Intermediate French III and Intermediate French IV	18
GERM 101 F & GERM 102 F & GERM 203 F & GERM 204 F OR	Elementary German I and Elementary German II and Intermediate German III and Intermediate German IV	18
ITAL 101 F & ITAL 102 F & ITAL 203 F & ITAL 204 F OR	Elementary Italian I and Elementary Italian II and Intermediate Italian III and Intermediate Italian IV	18
JAPN 101 F & JAPN 102 F & JAPN 203 F & JAPN 204 F OR	Elementary Japanese I and Elementary Japanese II and Intermediate Japanese III and Intermediate Japanese IV	18
SPAN 101 F or SPAN 101HF	Elementary Spanish I Honors Elementary Spanish I	5
SPAN 102 F or SPAN 102HF	Elementary Spanish II Honors Elementary Spanish II	5
SPAN 201 F or SPAN 203 F	Spanish for the Spanish Speaker Intermediate Spanish III	4-5
SPAN 204 F	Intermediate Spanish IV	4
<b>Restricted Electives - Select remaining units from Restricted Electives below:</b>		
<i>A second foreign language (any course from Level I through Level IV)</i>		
ENGL 102 F	Introduction to Literature	3
ENGL 225 F	World Literature since the Early Modern Period	3
FREN 200 F	Conversational French	2
GERM 200 F	Conversational German	2
HIST 110 F or HIST 110HF	Western Civilizations to 1550 (formerly Western Civilization I) Honors Western Civilizations to 1550 (formerly Western Civilization II)	3
HIST 154 F	Ancient Egypt	3
PHIL 100 F	Introduction to Philosophy	3
PHIL 105 F	World Religions	3
SPAN 200 F	Conversational Spanish	2
SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3
<b>Total Units</b>		<b>18</b>

<sup>1</sup> Note that students may not receive credit for either SPAN 101 F or SPAN 102 F and SPAN 201 F. Native Spanish speakers should enroll in SPAN 201 F and continue with SPAN 204 F. CSU and UC offer transfer credit for SPAN 203 F or SPAN 201 F, but not both. In the case of native Spanish speakers that follow the SPAN 201 F-SPAN 204 F sequence (9 units), the remaining units to complete the degree must be chosen from the restricted electives listed.

## Program Student Learning Outcomes

**Outcome 1:** Refine target language oral and written production in response to discourse related to self, family, social situations, school, work and societal issues.

**Outcome 2:** Refine target language oral and written production in response to written materials in the target language.

**Outcome 3:** Interpret similarities and differences between the cultural practices and perspectives of the target language and those of other cultures.

## Geography and the Environment

Division: Social Sciences

### Faculty

Aline Gregorio  
Ruben Lopez

### Degrees and Certificates

- Geography Associate in Arts Degree (p. 350)
- Geography Associate in Arts Degree for Transfer (p. 351)

### Courses

**GEOG 100 F Global Geography** **3 Units**  
54 hours lecture per term. This course is a survey of the world's geographical regions. It explores basic geographical concepts, human and physical spatial patterns, and contemporary social and environmental issues at the global and regional scales. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: GEOG 125)

**GEOG 100HF Honors Global Geography** **3 Units**  
54 hours lecture per term. This Honors-enhanced course is an overview to the world's geographical regions and an introduction to basic geographical concepts, as well as human and physical spatial patterns. The nature of global geography includes population dynamics and the social, political and economic organization of space. Field trips may be taken outside of regularly-scheduled class time. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 125)

**GEOG 102 F Physical Geography****3 Units**

54 hours lecture per term. This course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. Field trips may be taken outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 110)

**GEOG 102HF Honors Physical Geography****3 Units**

54 hours lecture per term. This Honors-enhanced course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. Field trips may be taken outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 110)

**GEOG 102LF Physical Geography Laboratory****1 Unit**

**Corequisite(s):** GEOG 102 F or GEOG 102HF with a grade of C or better.

54 hours lab per term. This lab/field study supplements GEOG 102 F. This course examines the processes of weather and climate, the construction/destruction of the earth's land surface focusing on internal and external forces, and the evolution of associated flora and fauna. This course will emphasize the understanding of the spatial distributions of the earth's physical characteristics and the relative importance of natural and human-induced environmental changes such as global warming, human land use and resources acquisition, and the transformation and creation of human environments. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOG 111)

**GEOG 120 F Global Environmental Problems****3 Units**

54 hours lecture per term. This course is a geographical evaluation of the causes and consequences of global environmental problems. The focus is on the spatial dimensions of global environmental crises as they relate to social, political and economic issues. Topics examine the historical evolution of environmental issues including population growth, agriculture, climate change, land-use, urbanization, endangered species, and sustainable development. Field trips outside of regularly-scheduled class time may be required. (CSU) (UC) (Degree Credit), AA GE, CSU GE, IGETC

**GEOG 130 F California Geography****3 Units**

54 hours lecture per term. This course investigates and interprets the physical, cultural and economic bases and regions of the state of California. Particular emphasis is placed upon the natural foundations of the landscapes with the exploration of the unique nature and special characteristics of the people utilizing that landscape. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: 140)

**GEOG 160 F Cultural Geography****3 Units**

54 hours lecture per term. This course provides a study of variations in the world's cultural landscapes, focusing on spatial patterns of population growth and distribution, settlement and livelihoods in the context of social, religious and political belief systems. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 120)

**GEOG 199 F Geography Independent Study****1 Unit**

54 hours independent study per term. This course is for students who wish to expand and deepen their knowledge and understanding of geographic concepts, topics, themes and ideas. (Degree Credit) (CSU) (UC)

**GEOG 230 F Introduction to Geographic Information Systems (formerly GEOG 281AF)****3 Units**

36 hours lecture and 54 hours lab per term. This course provides an introduction to concepts and use of Geographic Information Systems (GIS), and its role in geographic analysis and decision making. This course will include an introduction to basic cartographic principles, maps, scales, coordinate systems and map projections. Varied applications and examples of GIS technology used in the social sciences, governmental agencies, environmental science and business and industry will be presented. Specific topics and skills taught will include an understanding of GIS terminology, raster and vector data structures, data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial databases, including map features and attribute tables, and spatial analysis using map overlays, buffers, and networks. (Degree Credit) (CSU) (C-ID: GEOG 155)

**GEOG 262 F Economic Geography****3 Units**

54 hours lecture per term. This course is an investigation and interpretation of the world's economic organization, its natural resources, raw materials, crops and crop production, manufacturing and service industries, new trends in producing and the changing centers of production and consumption. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

## Geography Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03884

The **Geography Associate in Arts Degree** is designed to provide students with an introduction to both physical and human areas of geographic studies. It provides students the background knowledge needed by undergraduate geography majors for university transfer and coursework. This degree is excellent preparation for careers in international fields, law, science, environmental work and cultural diversity programs. The geographic perspective provides lifelong tools for interpreting the world's complex systems and world events. This degree requires a total of 19 - 20 units in the major in addition to other graduation requirements.

Code	Title	Units
<b>Required Courses (10 units):</b>		
GEOG 100 F	Global Geography	3
or GEOG 100HF	Honors Global Geography	
GEOG 102 F	Physical Geography	3
or GEOG 102HF	Honors Physical Geography	
GEOG 102LF	Physical Geography Laboratory	1
GEOG 160 F	Cultural Geography	3
<b>Restricted Electives (9-10 units):</b>		<b>9-10</b>
GEOG 120 F	Global Environmental Problems	3
GEOG 130 F	California Geography	3
GEOG 199 F	Geography Independent Study	1
GEOG 230 F	Introduction to Geographic Information Systems (formerly GEOG 281AF)	3
ESC 105 F	Introduction to Weather and Climate	3
<b>Total Units</b>		<b>19-20</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify, evaluate and critique human-environmental processes of globalization from a geo-spatial perspective.

**Outcome 2:** Define, describe and evaluate the uneven and unequal geographical outcomes of society and nature interrelationships.

**Outcome 3:** Describe, interpret and evaluate movement, migration and cultural traits related to the social construction of human/cultural landscapes.

**Outcome 4:** Apply the fundamental concepts of the scientific method and explain the basic components and interrelationships of earth's physical systems of the atmosphere, biosphere, hydrosphere and lithosphere.

## Geography Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A33078

The **Geography Associate in Arts Degree for Transfer**, also called the Geography AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in geography. Ed Code Section 66746-66749 states students earning the Geography AA-T degree will be granted priority for admission as a Geography major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC and 19 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. There are no additional graduation requirements. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

This degree is designed to provide students with an introduction to both physical and human areas of geographic studies. It provides students the background knowledge needed by undergraduate geography majors for university transfer and coursework. This degree is excellent preparation for careers in international fields, law, science, environmental work and cultural diversity programs. The geographic perspective provides lifelong tools for interpreting the world's complex systems and world events. The program requires a total of 19 - 20 units: 7 units in core required courses, and 12 - 13 units in restricted elective courses.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an

acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Core Courses (7 units):</b>		
GEOG 102 F or GEOG 102HF	Physical Geography Honors Physical Geography	3
GEOG 102LF	Physical Geography Laboratory	1
GEOG 160 F	Cultural Geography	3
<b>List A - Select 6 units from the following:</b>		<b>6</b>
GEOG 100 F	Global Geography	3
GEOG 100HF	Honors Global Geography	3
GEOG 230 F	Introduction to Geographic Information Systems (formerly GEOG 281AF)	3
<b>List B - Select 6-7 units from the following:</b>		<b>6-7</b>
GEOG 120 F	Global Environmental Problems (OR any course not selected from above from List A)	3
<i>and</i>		
ANTH 101 F or ANTH 101HF or ANTH 102 F or ANTH 102HF or ANTH 103 F or ECON 101 F or ECON 101HF or ECON 102 F or ECON 102HF or POSC 100 F or POSC 100HF or POSC 230 F or PSY 161 F or PSY 161HF or SOS 120 F	Physical Anthropology Honors Physical Anthropology Cultural Anthropology Honors Cultural Anthropology Introduction to Archaeology Principles of Economics - Micro Honors Principles of Economics - Micro Principles of Economics - Macro Honors Principles of Economics-Macro American Government Honors American Government Introduction to International Relations Elementary Statistics for Behavioral Science Honors Elementary Statistics for Behavioral Science Introduction to Probability and Statistics	3-4
<b>Total Units</b>		<b>19-20</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify, evaluate and critique human-environmental processes of globalization from a geo-spatial perspective.

**Outcome 2:** Define, describe and evaluate the uneven and unequal geographical outcomes of society and nature interrelationships.

**Outcome 3:** Describe, interpret and evaluate movement, migration and cultural traits related to the social construction of human/cultural landscapes.

**Outcome 4:** Apply the fundamental concepts of the scientific method and explain the basic components and interrelationships of earth's physical systems of the atmosphere, biosphere, hydrosphere and lithosphere.

# Geology

Division: Natural Sciences

## Degrees and Certificates

- Geology Associate in Science Degree (p. 354)
- Geology Associate in Science Degree for Transfer (p. 355)

## Courses

### ESC 100 F Physical Geology

3 Units

54 hours lecture per term. This introductory course explores the physical composition of the earth and those processes that modify its surface. Topics include rocks and minerals, plate tectonics, earthquakes, volcanoes, landslides, flooding, groundwater, beach processes, and earth resources. Contemporary environmental changes such as global warming and resource acquisition problems will also be discussed. Concurrent enrollment in ESC 100LF is recommended. Field trips may be taken. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 100)

### ESC 100LF Physical Geology Lab

1 Unit

**Corequisite(s):** ESC 100 F with a grade of C or better.

54 hours lab per term. This course covers identification of minerals and rocks, interpretation of topographic maps and geologic folios, study of landforms and rock structures and field studies. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOL 100L)

### ESC 101 F Earth Science Survey

3 Units

54 hours lecture per term. This course explores the fields of geology, oceanography, meteorology, and astronomy. Topics include earthquake and volcanic processes, global current patterns, beach formation, hurricane and tornado development, and star and planetary evolution. Special emphasis is placed on contemporary human-induced environmental changes such as global warming and resource acquisition. Class discussions will also focus on the interaction between science and society. Laboratory not required but recommended. Field trips may be required outside of regularly-scheduled class times. Laboratory not required but recommended. (Degree Credit) (CSU) (UC Credit Limitation: no credit for ESC 101 F if taken after college level class in astronomy, meteorology, geology or oceanography) AA GE, CSU GE, IGETC (C-ID: GEOL 120)

### ESC 101LF Earth Science Survey Lab

1 Unit

**Corequisite(s):** ESC 101 F with a grade of C or better.

54 hours lab per term. This course enhances topics covered in the ESC 101 F. This course includes exercises in identifying minerals and rocks, reading topographic maps, analyzing earthquakes, interpreting coastal processes, forecasting weather, and recognizing the stars and planets. Field trips may be taken. (Degree Credit) (CSU) (UC Credit Limitation: no credit for ESC 101LF if taken after college level class in astronomy, meteorology, geology or oceanography). CSU GE, IGETC (C-ID: GEOL 120L)

### ESC 102 F Survey of Natural Disasters

3 Units

54 hours lecture per term. This course explores those natural disasters that affect human activities. Topics include earthquakes, floods, landslides, volcanoes, hurricanes, tornados and asteroid/meteor impacts. The consequences of pollution and population growth will also be explored. Hypothetical and case histories of natural disasters will also be studied. Class discussions will focus on aspects of regional planning, environmental laws and the interaction between science and society. Field trips are optional. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE

### ESC 103 F Historical Geology

4 Units

54 hours lecture and 54 hours lab per term. This course covers the Earth's origin, geological development through time and history of its life are presented using the plate tectonic theory. The importance of environment to evolution and extinction of life forms are stressed. Study and classification of major rock and fossil groups, interpretation of geologic and topographic maps, and application of rock and fossil interpretations to geologic problems are included. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 111)

### ESC 104 F Geology of National Parks and Monuments

3 Units

54 hours lecture per term. This course is a description of the broad geologic features of North America with special emphasis on the U.S. National Parks and Monuments. Photographic slides and rock samples will be used to illustrate the geologic significance of the parks and monuments. Utilizing the plate tectonic theory, a geologic history of North America will be deduced from the descriptive geology. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) AA GE, CSU GE

### ESC 105 F Introduction to Weather and Climate

3 Units

54 hours lecture per term. This course examines the physical properties of the atmosphere including solar heating and cooling, atmospheric circulation, weather systems, extreme weather, atmospheric optics, climate change, and weather radar, maps and forecasting. The effects of human activities on Earth's climate will be emphasized. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOG 130)

### ESC 105LF Introduction to Weather and Climate Laboratory

1 Unit

**Corequisite(s):** ESC 105 F with a grade of C or better.

9 hours lecture and 27 hours lab per term. This course offers lab studies to correspond to material covered in ESC 105 F. Fundamental concepts in meteorology and measurement techniques including selected mathematical concepts used in developing an understanding of weather and climate will be covered. Analysis of real-time weather data will be stressed. Each lab experience will be preceded by an orientation lecture/discussion period. This course may include field trips. (Degree Credit) (CSU) (UC) CSU GE, IGETC (C-ID: GEOG 130)

### ESC 106 F Geology of Orange County Area

2 Units

36 hours lecture per term. This course examines the physical and historical geology of the Orange County area. The county will be analyzed for faults and folds, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips are required. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) AA GE

### ESC 107 F Earth Science for Educators

4 Units

54 hours lecture and 54 hours lab per term. This course engages students in a study of our dynamic planet, including its astronomy, geology, oceanography, and meteorology. Topics include solar system and planetary formation, earthquake and volcanic processes, waves and beach processes, global oceanic and atmospheric circulation patterns, severe storm development, and climate change. While open to all students, this course is oriented towards preparing future science teachers. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC



**ESC 110 F Introduction to Climate Science****3 Units**

54 hours lecture per term. This course engages students in a study of climate science including global warming and climate change. Students will examine interactions among Earth's various climate subsystems - the hydrosphere, lithosphere, atmosphere and biosphere - and how exchanges of energy and matter between them govern Earth's climate. The interaction of humans with the climate system will be woven throughout. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116 F Astronomy****3 Units****Advisory:** MATH 020 F.

54 hours lecture per term. This course is an introduction to the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. High School Algebra and Plane Geometry or equivalents are highly desirable. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116HF Honors Astronomy****3 Units****Advisory:** MATH 020 F or math skills clearance

54 hours lecture per term. This Honors-enhanced course is an introduction of the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. As an Honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. High school algebra and plane geometry or the equivalents are highly desirable. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 116LF Astronomy Lab****2 Units****Advisory:** MATH 020 F or math skills clearance and ESC 116 F.

72 hours lab per term. This course introduces the student to astronomical viewing and measurement as well as analysis of astronomical data. Students will do lab experiments to understand principles of astronomy and data analysis. They will use telescopes to make observations and gather data (or use computer images) and perform exercises relating to the moon, planets, stars, and galaxies. A field trip for dark sky observation may be arranged. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**ESC 117 F Field Astronomy****1 Unit****Advisory:** ESC 116 F and MATH 020 F or math skills clearance

18 hours lecture per term. This course is an introduction to methods of observational astronomy including naked eye, binocular and telescopic observations. Lectures will cover celestial sphere, celestial coordinates, motions of the sky, star charts and telescope optics. Students will be trained in using star charts, planispheres, planetarium software and telescopes. Overnight camping required. (Degree Credit) (CSU)

**ESC 120 F Geology of California****3 Units**

54 hours lecture per term. This course examines the physical and historical geology of California. Each of California's natural provinces will be analyzed for tectonic structures, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips may be taken. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 200)

**ESC 130 F Introduction to Oceanography****3 Units**

54 hours lecture per term. The lectures present a survey of the geological, physical, chemical, and biological principles and processes of oceanography. This course examines how these processes interact to form a variety of habitats within the marine ecosystem. An overview is provided of the physical properties of these habitats, along with the distribution and characteristics of organisms found within them. The interactions of humans with the marine environment is presented, as is an introduction to oceanographic tools and their uses. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 130HF Honors Introduction to Oceanography****3 Units**

54 hours lecture per term. This Honors-enhanced course presents a survey of the geological, physical, chemical, and biological principles and processes of oceanography. An overview is provided of the geological, physical and chemical properties of ocean ecosystems and examples are given of characteristics of organisms found within them. The role of technology and its application to studying the world ocean is woven throughout. Students will develop an understanding of the interaction of humans with the world ocean, especially in view of the critical scientific, environmental, social and political issues that emerge from ocean conservation efforts. Students are expected to critically analyze scientific and journalistic information and engage in written and oral debate to reach a deeper understanding of these issues. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**ESC 130LF Introduction to Oceanography: Field Experience****1 Unit****Corequisite(s):** ESC 130 F with a grade of C or better.

9 hours lecture and 27 hours lab per term. This course offers field studies to correspond to material covered in ESC 130 F. Each field experience will be preceded by an orientation lecture/discussion period. May include field work from boats. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**ESC 140 F Geology of California Coastal Areas****2 Units**

36 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas along California's coastline. Lectures will examine the geologic importance of coastal areas and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 141 F Geology of the Anza-Borrego Desert State Park Area****1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Anza-Borrego Desert State Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 142 F Geology of Mojave Desert Area****1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Mojave Desert area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ESC 143 F Geology of the Owens Valley and Mammoth Lakes Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Owens Valley-Mammoth Lakes area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 144 F Geology of Southern California Mountain Areas 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Transverse Ranges and Santa Ana Mountains area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 145 F Geology of the Death Valley National Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Death Valley National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU)

**ESC 146 F Geology of the Joshua Tree National Park Area 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Joshua Tree National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic hazards and the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU)

**ESC 147 F Geology of Colorado Plateau Areas 2 Units**

36 hours lecture per term. This course involves lecture and field study of geologic features and processes in selected areas of the Colorado Plateau. Lectures will explore the geologic significance of these areas and how to recognize key geologic hazards and resource potential. Areas of study may include Grand Canyon, Zion, Bryce Canyon, Capital Reef, Arches, and Canyonlands national parks. Students will be trained to use various scientific tools for conducting geologic field studies. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU)

**ESC 190 F Environmental Geology 3 Units**

54 hours lecture per term. This course explores those geologic processes that influence human activities. Topics include the geologic hazards, such as earthquakes, floods, landslides, and volcanoes; the occurrences and limitations of natural resources; and the consequences of pollution and waste disposal on the earth. Hypothetical and case histories of natural disasters will be studied. Class discussions will also focus on geologic aspects of regional planning, environmental laws, and the interaction between science and society. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: GEOL 130)

**ESC 196 F Regional Field Studies in Geology 1 Unit**

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas throughout the Southwestern United States. During a given semester, multiple sections may be offered to different study areas or for different topics. Lectures will examine the geologic importance of the area to be visited and how to recognize key geologic features in the field. Study areas include, but are not limited to, Mojave Desert, the Sierra Nevada, and coastal areas. Areas outside of California (i.e., Arizona, New Mexico) may also be selected. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (Degree Credit) (CSU)

**ESC 199 F Earth Science Independent Study 1-3 Units**

**Prerequisite(s):** ESC 100 F or ESC 101 F or ESC 130 F, with a grade of C or better  
54-162 hours independent study per term. This course involves lab and/or field investigations of earth science phenomena under the guidance of members of the earth sciences faculty. Designed primarily for majors in earth sciences, or teachers who wish to increase their knowledge of the sciences, the course provides individual study and small group interactions. Independent research problems with staff supervision are conducted upon approval. Hours to be arranged. Field trips may be required. Outside reading and a written report required. Presentation of research at scientific conferences is encouraged. Elective credit in the sciences area. (Degree Credit) (CSU) (UC review required)

**ESC 230 F Coastal Oceanography 3 Units**

36 hours lecture and 54 hours lab per term. This course engages students in a study of the geological, physical, chemical, and biological oceanography of the coastal ocean of Southern California and the California Current Large Marine Ecosystem. (Degree Credit) (CSU)

## Geology Associate in Science Degree Requirements

**PROGRAM CODE:** 2S03874

This **Geology Associate in Science Degree** is designed to introduce the student to the field of geology. Students who complete the degree will be prepared for future study in geology or related fields. This degree requires a total of 18-20 units of which 8 units are in required courses. An additional 10-12 units must be chosen from the list of restricted electives.

Code	Title	Units
<b>Required Courses (8 units):</b>		
ESC 100 F	Physical Geology	3
ESC 100LF	Physical Geology Lab	1
ESC 103 F	Historical Geology	4
<b>Restricted Electives (10-12 units):</b>		<b>10-12</b>
BIOL 170 F	Organismal Biology	5
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
ENGR 101AF	Surveying I	4
ESC 104 F	Geology of National Parks and Monuments	3
ESC 105 F	Introduction to Weather and Climate	3
ESC 106 F	Geology of Orange County Area	2
ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 190 F	Environmental Geology	3

MATH 151 F	Calculus I (formerly MATH 150AF)	4
	or MATH 151HF Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
	or MATH 152HF Honors Calculus II	
PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II	4
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
<b>Total Units</b>		<b>18-20</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore topics in geology.

**Outcome 2:** Apply geology concepts to better understand current issues of environmental and/or geologic concern.

## Geology Associate in Science Degree for Transfer

### Requirements

PROGRAM CODE: 2S36883

The **Associate in Science in Geology for Transfer (AS-T) Degree**, also called the Geology AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in geology. Ed Code Section 66746-66749 states that students earning the Geology AS-T Degree will be granted priority for admission as a Geology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE (p. 502) or IGETC (p. 509) and 26 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. There are no additional graduation requirements. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better. Students with a degree in geology may pursue careers in a variety of industries such as education, environmental technology, mineral (fossil fuels, metals) discovery and extraction, archeology, research, and more. The Geology AS-T Degree requires a total of 26 units of required courses as indicated below. Recommended courses are not required for the degree but are highly recommended if you plan to pursue the Bachelor's in Science degree in geology.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (26 units):</b>		
ESC 100 F & ESC 100LF	Physical Geology and Physical Geology Lab	4
ESC 103 F	Historical Geology	4
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
MATH 151 F or MATH 151HF	Calculus I (formerly MATH 150AF) Honors Calculus I (formerly MATH 150HF)	4
MATH 152 F or MATH 152HF	Calculus II (formerly MATH 150BF) Honors Calculus II	4
<b>Recommended Courses (0-13 units):<sup>1</sup></b>		
BIOL 101 F or BIOL 101HF	General Biology Honors General Biology	5
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
<b>Total Units</b>		<b>26</b>

<sup>1</sup> Contact your specific transfer institution for more information.

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore topics in geology.

**Outcome 2:** Apply geology concepts to better understand current issues of environmental and/or geologic concern.

## Health Sciences

Division: Natural Sciences

### Faculty

#### Anatomy and Physiology Microbiology

Michael Baker  
Bradley Dawson  
Kaitlin Kroupa  
Jacob Sapiro

### Degrees and Certificates

#### Anatomy and Physiology

Pre-Nursing Associate (p. 443) in Arts Degree (p. 443)

#### Microbiology

Microbiology Associate in Science Degree (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/microbiology/microbiology-associate-science-degree/>)

## Courses

### **ANAT 231 F General Human Anatomy 4 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance

54 hours lecture and 54 hours lab per term. This course includes a logical analysis of body tissues, organs and systems. It stresses the microscopic, developmental and gross anatomy of mammals, with special emphasis on human anatomy. Special attention is given to pathological as well as normal conditions. The laboratory work includes study of the developmental, microscopic and gross anatomy of preserved specimens and models. This course is designed primarily for students interested in careers in various allied health fields. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: BIOL 110B)

### **ANAT 240 F Human Physiology 5 Units**

**Prerequisite(s):** CHEM 101 F and ANAT 231 F, both with a grade of C or better

54 hours lecture and 108 hours lab per term. This course provides an in-depth study of human function. The focus of the course is maintenance of homeostasis. Organ systems are studied with respect to their interactions under normal and abnormal conditions. Laboratory experiences reinforce concepts studied in lecture and introduce students to clinical techniques. The course is designed for pre-health profession majors and other students that require a one semester course in physiology. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: BIOL 120B)

### **MICR 220 F Medical Microbiology 4 Units**

**Advisory:** Biological sciences lab course

54 hours lecture and 54 hours lab per term. This course focuses on the study of microorganisms that pose significant health problems at both the personal and community level. Special attention is given to the topics of infectious disease transmission, immunology, sanitation and prophylaxis. Principles of applied microbiology are stressed. Recommended for students planning to enter two-year allied health professional programs. (CSU) (Degree Credit) AA GE, CSU GE

### **MICR 262 F General Microbiology 5 Units**

**Prerequisite(s):** CHEM 101 F or equivalent with a grade of C or better and a biological science lab course that includes cellular structure/function (such as ANAT 231 F, BIOL 101 F, BIOL 170 F, etc.) with a grade of C or better.

54 hours lecture and 108 hours lab per term. This course studies the morphology, taxonomy, metabolism, and molecular genetics of microbes with emphasis on bacteria, protozoa, viruses, helminths and fungi. The role of microorganisms in the disease process, epidemiology, immunology and chemotherapeutic control measures, environmental impact and industrial application are discussed. Laboratory exercises focus on the development of basic techniques in aseptic handling, visualization, and quantification of microbes. Other lab exercises include sampling water and soil for medically or environmentally important microbes, assessing antibiotic sensitivity, fluorescent microscopy, and immunoassays. This course is designed for students pursuing a career or major in microbiology and various allied health professions. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

Kristen Shedd  
Matthew Tribbe

## Degrees and Certificates

- History Associate in Arts Degree (p. 358)
- History Associate in Arts Degree for Transfer (p. 359)

## Courses

### **HIST 110 F Western Civilizations to 1550 (formerly Western Civilization I) 3 Units**

54 hours lecture per term. This course is a study of western civilization from prehistoric times through the 16th century, e.g., Mesopotamian, Egyptian, Hebrew, Greek, Roman, Byzantine, Muslim, Medieval, Renaissance and Reformation societies. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 170)

### **HIST 110HF Honors Western Civilizations to 1550 (formerly Western Civilization II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a study of western civilization from prehistoric times through the sixteenth century, e.g., Mesopotamian, Egyptian, Hebrew, Greek, Roman, Byzantine, Muslim, Medieval, Renaissance and Reformation societies. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 170)

### **HIST 111 F Western Civilizations Since 1550 (formerly Western Civilization II) 3 Units**

54 hours lecture per term. This course is an examination of Western civilizations from the sixteenth century to the present, including the development of modern society, arts, industry, human rights, democracy, warfare, and political and economic systems. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 180)

### **HIST 111HF Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a continuation of HIST 110 or 110HF Western civilizations. It is a study of the development of western civilizations from the sixteenth century to the present day, emphasizing the political, economic, religious, social, and cultural forces at work in the various geographic areas. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 180)

### **HIST 112 F World Civilizations to 1550 (formerly World Civilizations I) 3 Units**

54 hours lecture per term. This course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from earliest times to about 1550. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 150)

## History

Division: Social Sciences

## Faculty

Joshua Ashenmiller  
Anupama Mande  
Lynne Negus

**HIST 112HF Honors World Civilizations to 1550 (formerly Honors World Civilizations I) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of the development and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from the earliest times to AD 1550. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 150)

**HIST 113 F World Civilizations Since 1550 (formerly World Civilizations II) 3 Units**

54 hours lecture per term. This course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from CE 1550 to the present. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 160)

**HIST 113HF Honors World Civilizations Since 1550 (formerly Honors World Civilizations II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from AD 1550 to the present. This Honors-enhanced course will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: HIST 160)

**HIST 127 F Survey of United States History (formerly Survey of American History) 3 Units**

54 hours lecture per term. This course is a survey of U.S. history from the colonial foundations to the present time. It covers major changes in society; politics, economics and culture throughout the history of the United States. Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 151 F Survey of British History I 3 Units**

54 hours lecture per term. This course is a survey of British history from prehistoric times to 1714 and emphasizes the contributions of Celts, Romans, Anglo-Saxons and Normans; the structure of society; the growth of monarchy, Common Law, Parliament and other governmental institutions; the development of architecture and literature; the role of the Church; and transformations brought by Reformation and Revolution during the Tudor-Stuart period. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 152 F Survey of British History II 3 Units**

54 hours lecture per term. This course is a survey of British history from 1714 to the present, emphasizing the role of prime ministers as well as monarchs; the development of foreign policy and naval power; the evolution of science, religion, education, literature, painting and architecture; the changes brought about by industrialization and two World Wars; the growth of the welfare state and the rise and fall of the British empire. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 154 F Ancient Egypt 3 Units**

54 hours lecture per term. This course surveys Egyptian politics, economy, society, religion, and the arts from the Pre-dynastic period through Cleopatra. It also investigates Egypt's connections with neighboring cultures of Africa, the Mediterranean, and the Middle East. An introduction to hieroglyphs is included. This course fulfills the Multicultural Education Requirement for graduation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 160 F Asian Civilizations I (formerly HIST 160AF) 3 Units**

54 hours lecture per term. This course is a study of the historical developments of Asia's three great civilizations up to the 1800's. Concentration will be on the traditional institutions shaped by the religious and philosophical concepts of these civilizations. Certain concepts in Hinduism, Buddhism, Confucianism, Taoism, and Shintoism will be studied as they affected major Asian historical developments. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 161 F Asian Civilizations II (formerly HIST 160BF) 3 Units**

54 hours lecture per term. This course is a study of the revolutionary changes that have taken place in basic Asian traditions and institutions. Focus will be on the efforts to replace traditional institutions with something "modern" in response to the coming of the West to Asia and to the challenge of Western ideas. Examination will be made of the impact of such concepts as capitalism, democracy, imperialism, nationalism, and communism on the traditional culture of these countries. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 165 F Introduction to the Middle East 3 Units**

54 hours lecture per term. This course examines the historical development of the Middle East from the prophet Mohammed to the present, emphasizing the Islamic religion, art, philosophy, as well as key political and social conflicts of modern times. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 165HF Honors Introduction to the Middle East 3 Units**

54 hours lecture per term. This Honors-enhanced course is a historical development of the Middle East from the prophet Mohammed to the present, emphasizing Islamic religion, art, philosophy, and key political and social conflicts of modern times. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 170 F History of the United States to 1877 (formerly History of the United States I) 3 Units**

54 hours lecture per term. This course is a survey of U.S. history from the colonial era to 1877, and examines the diversity of cultures during this period. Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) AA GE, CSU GE, IGETC (C-ID: HIST 130)

**HIST 170HF Honors History of the United States to 1877 (formerly Honors History of the United States I) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of U.S. history from the colonial era to 1877, examining the diversity of cultures during this period. (CSU) (UC Credit Limitation) Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) AA GE, CSU GE, IGETC (C-ID: HIST 130)

**HIST 171 F History of the United States Since 1877 (formerly History of the United States II) 3 Units**

54 hours lecture per term. This course is a survey of American History from 1877 to the present, examining the diversity of American cultures during this period. (CSU) (UC Credit Limitation. Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171 HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit). AA GE, CSU GE, IGETC (C-ID: HIST 140)

**HIST 171HF Honors History of the United States Since 1877 (formerly Honors History of the United States II) 3 Units**

54 hours lecture per term. This Honors-enhanced course is a survey of American history from 1877 to the present time, examining the diversity of American cultures during this period. Credit will be granted for either (HIST 127 F) or (HIST 170 F and HIST 171 F) or (HIST 170 F and HIST 171 HF) or (HIST 170HF and HIST 171 F) or (HIST 170HF and HIST 171HF). (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: HIST 140)

**HIST 190 F History of the Americas I (formerly HIST 162AF) 3 Units**

54 hours lecture per term. This course is a survey of the history of the Western Hemisphere from its discovery to the wars of independence. Emphasis is placed upon the European inheritance, the interaction of this inheritance with the native and African cultures and the planting of colonial societies in the new world. Spanish America, Brazil, Canada, and the United States are compared as to their socio-cultural, economic, and political development during the colonial and independence periods. This course satisfies the state requirements in American History and Institutions. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 191 F History of the Americas II (formerly HIST 162BF) 3 Units**

54 hours lecture per term. This course is a comparative study of the political, social and economic development of the independent nations of the Western Hemisphere from the wars of independence to the present. Emphasis is placed upon present international relations of these nations. This course satisfies the State requirements in American History and Institutions. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 199 F History Independent Study 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area of history through individual research and study. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)

**HIST 270 F Women in United States History 3 Units**

54 hours lecture per term. This course focuses on women in American society from the Colonial era to the present with emphasis on the social sphere of women, women's health, and the roles of women in wartime and peace and in such movements as antebellum reform, suffrage and feminism as well as the gender specific problems for women in the United States. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 273 F United States Environmental History 3 Units**

54 hours per lecture term. This course surveys the environmental history of the United States from the earliest human migrations to the present day, focusing on the complex ways people have perceived, relied on, interacted with and been affected by the natural world. Topics include human interactions with land, water, plants, animals, and energy sources. The course considers the economic, political, social, cultural, technological and global aspects of these interactions. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**HIST 275 F History of California 3 Units**

54 hours lecture per term. This course is a geographical, ethnic, social, economic, intellectual, and political history of California from the earliest times to the present. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**HIST 299 F History Independent Study - Advanced 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area of history through individual research and study. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)

## History Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A03883

The **History Associate in Arts Degree** is designed to prepare students to acquire basic historical knowledge and academic skills both to transfer to a four year institution and to understand historical causes of current events. History is the study of change over time. Historians analyze cause and effect, construct narratives from primary and secondary sources, and try to explain the actions of people in the past. Students in history courses learn more than dates, names, and events. They also learn how to interpret, debate, and draw conclusions. History majors acquire a broad perspective on the human experience and appreciate how the past shaped the present. A History degree is an excellent general preparation for careers in education, law, historical research, historical preservation, government, journalism, media, and communication. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (6 units):</b>		
HIST 170 F	History of the United States to 1877 (formerly History of the United States I)	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II)	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
<b>List A - Restricted Electives (6 units):</b>		
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I)	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II)	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II)	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	
<b>List B, Group 1 - Restricted Electives (3 units):</b>		<b>3</b>

<b>(Any List A course not used above, OR)</b>		
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 171 F	Asian Pacific Islander American History	3
HIST 154 F	Ancient Egypt	3
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3
HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3
HIST 165 F	Introduction to the Middle East	3
HIST 270 F	Women in United States History	3
<b>List B - Group 2 - Restricted Electives (3 units):</b>		<b>3</b>
<b>(Any List A course not used above OR)</b>		
HIST 151 F	Survey of British History I	3
HIST 152 F	Survey of British History II	3
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3
HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
HIST 275 F	History of California	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify important events, themes, and concepts of United States, Western Civilization, and World History.

**Outcome 2:** Investigate historical problems and issues by consulting primary and secondary sources.

**Outcome 3:** Identify an author's thesis or main idea in a historical work.

## History Associate in Arts Degree for Transfer

### Requirements

**PROGRAM CODE:** 2A31522

The **History Associate in Arts Degree for Transfer**, also called the History AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in History. Ed Code Section 66746-66749 states students earning the History AA-T degree will be granted priority for admission as a History major to a local CSU, as determined by the CSU campus to which the student applies. History is the study of change over time. Historians analyze cause and effect, construct narratives from primary sources, and try to explain the actions of people in the past. Students in history courses learn more than dates, names, and events. They also learn how to interpret, debate, and draw conclusions. History majors acquire a broad perspective on the human experience and appreciate how the past shaped the present. A History degree is an excellent general preparation for careers in education, law, historical research, historical preservation, government, journalism, media, and communication.

The History AA-T Degree requires a total of 18 units of required courses and restricted electives. The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

<b>Code</b>	<b>Title</b>	<b>Units</b>
<b>Required Core (6 units):</b>		<b>6</b>
HIST 170 F	History of the United States to 1877 (formerly History of the United States I)	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II)	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
<b>List A - Select two courses (6 units):</b>		<b>6</b>
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I)	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II)	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II)	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	
<b>List B, Group 1 - Select one course (3 units):</b>		<b>3</b>
<b>Any List A course not used above OR</b>		
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 171 F	Asian Pacific Islander American History	3
HIST 154 F	Ancient Egypt	3
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3
HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3

HIST 165 F	Introduction to the Middle East	3
or HIST 165HF	Honors Introduction to the Middle East	
HIST 270 F	Women in United States History	3
<b>List B, Group 2 - Select one course (3 units):</b>		<b>3</b>
<b>Any List A course not used above OR</b>		
HIST 151 F	Survey of British History I	3
HIST 152 F	Survey of British History II	3
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3
HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
HIST 275 F	History of California	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify important events, themes, and concepts of United States, Western Civilization, and world history.

**Outcome 2:** Investigate historical problems and issues by consulting primary and secondary sources.

**Outcome 3:** Identify an author's thesis or main idea in a historical work.

## Horticulture

Division: Natural Sciences

### Faculty

Jeffery Feaster  
Swayzer, Luellen

### Degrees and Certificates

- Greenhouse and Nursery Production Certificate (p. 363)
- Landscape Design/Management Certificate (p. 363)
- Landscape Horticulture Certificate (p. 364)
- Landscape Irrigation Certificate (p. 364)
- Landscape Management Associate in Science Degree (p. 365)
- Nursery Management Associate in Arts Degree (p. 365)
- Ornamental Horticulture Associate in Science Degree (p. 365)
- Ornamental Horticulture Certificate (p. 366)
- Pest Management Certificate (p. 366)

### Courses

**HORT 001 F Principles of Horticulture I** **4 Units**  
54 hours lecture and 54 hours lab per term. This course covers the identification and use of ornamental plants; culture of landscape plants; morphology of leaves, flowers and fruits; survey of soil properties and fertilizers; safe and responsible use of pesticides and their alternatives; landscape design principles for basic horticulture skills in the gardening and nursery trades. (Degree Credit)

**HORT 002 F Principles of Horticulture II** **4 Units**  
54 hours lecture and 54 hours lab per term. This course covers plant propagation techniques, weed control for ornamental plantings, disease and pest control in the landscape and turf grass management techniques.

**HORT 005 F Basic Landscape Plants I** **3 Units**  
54 hours lecture per term. This course covers the identification and study of trees, shrubs, vines; tropical and herbaceous plant material of landscape value. Special emphasis is placed on fall-blooming as well as broadleaf and narrowleaf plants. This is course designed for non-majors, homeowners, and those engaged in the fields of landscaping and horticulture. Not open for transfer credit for majors in Ornamental Horticulture and Landscape Architecture as a substitute for HORT 160 F.

**HORT 006 F Basic Landscape Plants II** **3 Units**  
54 hours lecture per term. This course covers the identification and study of trees, shrubs, vines and herbaceous plant material of landscape value. Plants emphasized in this course include spring-blooming deciduous plants and additional plants not covered in HORT 005 F. This course is designed for non-majors, homeowners, and those engaged in the fields of landscaping and horticulture. This course is not transferable and cannot be used as a substitute for HORT 161 F in the Ornamental Horticulture or Nursery Management AS Degree.

**HORT 008AF Landscape Pruning Techniques** **1 Unit**  
18 hours lecture and 18 hours lab per term. This course covers the principles and practices used in pruning ornamental shrubs, trees, vines, herbaceous perennials, groundcovers and fruit trees found in residential and commercial landscapes. Special attention is given to appropriate plant use and maintenance. Field trips may be required outside of regularly scheduled class times. Pass/No Pass or Letter Grade option.

**HORT 008BF Basic Turf Care** **1 Unit**  
12 hours lecture and 18 hours lab per term. This course covers the fundamentals of lawn care for homeowners including planting, fertilization, irrigation, weed control, and pest control. Special techniques and equipment used for lawn renovation are also covered.

**HORT 008CF Home Pest Control** **1 Unit**  
12 hours lecture and 18 hours lab per term. This course covers the fundamentals of pest control for homeowners including identification and control of weeds, insects, vertebrates, arachnids, mollusks and diseases. Special emphasis is given to integrated Pest Management as a home pest control technique.

**HORT 010AF Landscape Lighting** **1.5 Units**  
18 hours lecture and 27 hours lab per term. This course covers the principles and practices used in lighting outdoor trees, shrubs, planter beds and living spaces. Emphasis is given to appropriate selection of code-approved low voltage electrical components, wiring and lighting fixtures for residential use.

**HORT 010BF Landscape Water Features** **1.5 Units**  
18 hours lecture and 27 hours lab per term. This course covers design and installation of landscape water features including ponds, garden streams, fountains and container water gardens. Students learn current construction techniques through an on-site installation.

**HORT 045 F Pest Control Certification and Safety** **3 Units**  
36 hours lecture per term. This course is designed to assist persons desiring to be licensed as Pest Control Advisors or Pest Control Operators of pesticide dealers. Instruction involves laws and regulations, pesticide safety, control of insects, mites, nematodes and other invertebrate pests, plant disease control, and plant growth regulators used in the landscaping business. California Department of Food and Agriculture continuing education hours are available for this course.



- HORT 046 F Pest Safety for Landscape Work** 2 Units  
36 hours lecture per term. This course is designed to teach pesticide safety to Spanish and English-speaking landscape workers. Students learn safe operations of application equipment, pesticide toxicity ratings, methods of exposure and pesticide labeling along with information about pest and disease life cycle and post host relationships.
- HORT 058 F Irrigation Controller Programming** 2 Units  
54 hours lecture and 54 hours lab per term. This course provides hands-on experience in which students will learn the fundamentals of programming irrigation controllers and the steps involved in programming some of the most popular irrigation controllers available in the industry. Practical situations will be used to show the applications of basic and advanced controller features. The course will also provide a review of various Central control computer irrigation systems. Three field trips will be scheduled to give students the opportunity to examine central control systems as water management tools in large commercial and recreational areas.
- HORT 070 F Volunteer Naturalist Training** 2.5 Units  
36 hours lecture and 27 hours lab per term. This is a basic ecology course dealing specifically with the ecosystems represented in the wilderness parks and nature preserves of Orange County. Special emphasis will be placed on the natural history, geology and cultural history of our undeveloped areas. Training will also be given in the skills required to lead nature tours in the parks. Assumes no science background. Weekly field trips required.
- HORT 075 F Habitat Assessment and Restoration** 2.5 Units  
36 hours lecture and 27 hours lab per term. This course is designed to introduce students to the ecological theory, and practical application of a variety of habitat assessment, restoration and monitoring techniques. Scientific, social and legal aspects of restoration will be discussed. Training will emphasize habitat evaluation and restoration techniques used by industry, government agencies and environmental organizations. Weekly field trips will visit and assist in assessment and restoration projects.
- HORT 152 F Applied Botany** 4 Units  
54 hours lecture and 54 hours lab per term. This course includes the study of plant growth and development, horticultural practices, and an overview of horticulture as a science, an art and an industry. Practical exercises and field trips are part of the lab work. (Degree Credit) (CSU) AA GE, CSU GE
- HORT 153 F Landscape Irrigation** 3 Units  
36 hours lecture and 54 hours lab per term. This course covers the principles and practices of installing basic irrigation systems. It includes the study of fittings, piping, valves, backflow preventers, controllers, and sprinklers; basic hydraulics, friction loss calculations and beginning irrigation design are also covered. (Degree Credit) (CSU)
- HORT 154 F Irrigation Design** 3 Units  
*Prerequisite(s):* HORT 153 F with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course covers the principles and practices of designing and drawing plans for residential and small commercial irrigation systems. Includes the study of component selection, sprinkler spacing and location, hydraulic calculations, graphics presentations and current practices in producing professional quality irrigation design documents. (Degree Credit) (CSU)
- HORT 155 F Soils** 3 Units  
36 hours lecture and 54 hours lab per term. This course covers the following physical, chemical, and biological properties of soils: formation, texture, structure, compaction, stability and drainage, permeability and water-holding capacity, soil reaction, ionic exchange, organic matter, soil classification, water conservation, and soil conservation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC)
- HORT 156 F Plant Nutrition** 2 Units  
27 hours lecture and 27 hours lab per term. This course covers the composition, value and use of fertilizers, soil correctives and soil amendments. Methods and techniques employed in detailed fertility analysis and horticultural suitability of soil media. Application equipment and fertilizer injection techniques. (Degree Credit) (CSU)
- HORT 157 F Irrigation Principles** 3 Units  
*Prerequisite(s):* HORT 153 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course covers the study and application of plant, soil and water relationships as they relate to irrigation. Sprinkler precipitation rates, soil infiltration rates and plant evapotranspiration rates are investigated to determine optimal irrigation, programming and efficient water usage. Lab hours will include field trips, laboratory investigations and on-site analysis. (Degree Credit) (CSU)
- HORT 158 F Landscape Irrigation Drip and Low Volume** 3 Units  
36 hours lecture and 54 hours lab per term. This course covers the principles and practices of water conservation in landscapes by utilization of drip and low volume (low flow) irrigation systems. Special attention is given to system design, installation and operation of residential and commercial applications. (Degree Credit) (CSU)
- HORT 160 F Plant ID and Ornamental Trees** 3 Units  
54 hours lecture per term. This course studies broadleaf and conifer trees used in California landscapes, with special emphasis on identification. Recommended as a transfer course for majors in horticulture and landscape architecture. (Degree Credit) (CSU) (UC Credit Limitation: HORT 160 F and HORT 161 F combined; maximum credit one course)
- HORT 161 F Plant ID/Ornamental Shrubs** 3 Units  
54 hours lecture per term. This course covers the study of ornamental shrubs, ground covers, vines, tropical and herbaceous plant material used in California landscapes with special emphasis on identification. Recommended as a transfer course in the majors of horticulture and landscape architecture. (Degree Credit) (UC Credit Limitation)
- HORT 162 F Landscaping for Dry Climates** 3 Units  
*Advisory:* HORT 200 F  
36 hours lecture and 54 hours lab per term. This course covers the effects of Southern California environment on plant selection, knowledge of the growth requirements of selected native and exotic species, and their proper usage in landscapes. Emphasis is on functional values and aesthetic qualities of native and exotic drought-tolerant plants. Through development of the design process the student will create landscape plans and make site analysis evaluations using an inventory of appropriate native and drought-tolerant exotic species. Field trips are integrated as part of the laboratory projects, including one weekend trip which is required of all students. (Degree Credit) (CSU)
- HORT 164 F Plant Identification - Annuals, Perennials and Houseplants** 3 Units  
54 hours lecture per term. This course covers the study of annuals, perennials, and houseplants used throughout California, with special emphasis on identification. It includes a comparison of the care requirements, culture and landscape usage for approximately 175 herbaceous ornamental plants. Recommended as a transfer course in the majors of horticulture and landscape architecture. (Degree Credit) (CSU)
- HORT 165 F Landscape Management** 4 Units  
54 hours lecture and 54 hours lab per term. This course introduces students to the requirements for successfully managing maintenance aspects of landscapes. This course covers new plantings and maintenance of existing plantings, including pruning, fertilization, pest control, lawn care, and landscape estimating. (Degree Credit) (CSU)

- HORT 168 F Landscape Construction** **3 Units**  
54 hours lecture per term. This course covers the use and cost estimates of various landscape construction materials. Problems dealing with structure, grading, drainage, sprinklers, masonry, and electricity used in landscape construction. This course is designed for students qualifying for the State Landscape Contractors Examination. (Degree Credit) (CSU)
- HORT 169LF Landscape Construction Laboratory** **1 Unit**  
*Corequisite(s):* HORT 168 F with a grade of C or better.  
54 hours lab per term. This course covers lab exercises in the use of wood, concrete, brick, blocks, and other materials of construction as they relate to structures, drainage, grading, utilities, and irrigation. (Degree Credit) (CSU)
- HORT 170 F Landscaping Contracting** **3 Units**  
54 hours lecture per term. This course covers the legal requirements and obligations of the landscape contractor, including contractor's law, lien rights, subcontractor regulations and employee labor law. It includes estimating and cost analysis for landscape trades. The course is directed toward preparing the student for passing the State Landscape Contractor's License Examination. (Degree Credit) (CSU)
- HORT 173 F Greenhouse and Nursery Production** **3 Units**  
36 hours lecture and 54 hours lab per term. This course presents current production methods used in producing greenhouse and nursery plants. Greenhouse and nursery facilities and equipment will be covered along with business practices, computer applications, nursery automation and current irrigation systems. This course is recommended for students seeking careers in nursery-related trades. (Degree Credit) (CSU)
- HORT 174 F Plant Propagation** **3 Units**  
36 hours lecture and 54 hours lab per term. This course covers the theoretical and commercial practices of plant propagation, including seeding and transplanting, preparation of cuttings, layering, division, budding and grafting, and micro propagation techniques. The use of plant hormones, plant physiology and genetic manipulation are discussed. (Degree Credit) (CSU)
- HORT 177 F Turf Grass Management** **3 Units**  
36 hours lecture and 54 hours lab per term. This course covers the management and pest control in turf grasses. Included are laboratory and field experience in the identification, planting, management practices, renovation, fertilization and pest management methods. This course is valuable to individuals entering fields of landscape management, nursery management and landscape architecture; also gold course managers, stadium and athletic field managers, park managers and managers of memorial parks. (Degree Credit) (CSU)
- HORT 185 F Arboriculture** **2 Units**  
18 hours lecture and 54 hours lab per term. This course covers current practices in maintaining trees through correct pruning, cabling and cavity repair. In addition, tree growth characteristics, local codes and regulations and safety practices related to pruning are covered. This course prepares students for the Certified Arborists examination. (Degree Credit) (CSU)
- HORT 188 F Integrated Pest Management** **2 Units**  
27 hours lecture and 27 hours lab per term. This course provides students with a fundamental knowledge of integrated pest management. During the class, students learn to develop and implement pest control programs using cultural, biological and chemical methods. Emphasis will be placed on pest identification, pest monitoring and analysis of plant symptoms. (Degree Credit) (CSU)
- HORT 200 F Landscape Design** **3 Units**  
36 hours lecture and 54 hours lab per term. This course covers basic drafting techniques combined with the principles of design leading to formal landscape drawings of homes. Includes the proper association of plant materials according to texture, color, mass, and cultural requirements. (Degree Credit) (CSU) (UC)
- HORT 201 F Advanced Landscape Design** **3 Units**  
*Prerequisite(s):* HORT 200 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course is a continuation of graphics, plant usage, and design theory covered in HORT 200 F with emphasis on hillside developments and commercial projects. A survey of historical development of landscape. Design of landscape structures (walls, patio overheads, steps, walkways, pools) with focus placed on the basic qualities of the construction materials. Elements of perspective drawings for project presentations. Detailed site analysis and evaluation of ecological factors. Field trips are part of laboratory, including one weekend trip required of all students. (Degree Credit) (CSU)
- HORT 205 F Applied Entomology** **3 Units**  
36 hours lecture and 54 hours lab per term. This course covers the principles of entomology including external anatomy and internal anatomy and physiology, insect relatives, and insect classification and identification. Concepts of insect pest management techniques will be included. An insect collection with proper identification to order and family will be required of all students with laboratory and field examination placing emphasis on identification and control. (Degree Credit) (CSU) AA GE, CSU GE
- HORT 207 F Plant Pathology** **3 Units**  
36 hours lecture and 54 hours lab per term. This course is an introductory study of the major plant diseases and their control. Fungi, bacteria, viruses, and nematodes causing diseases of economic crops throughout the U.S. are examined in the lab, greenhouse, and field. (Degree Credit) (CSU) AA GE, CSU GE
- HORT 215 F Diseases/Pests Ornament Plants** **4 Units**  
*Prerequisite(s):* HORT 205 F or HORT 207 F with a grade of C or better  
54 hours lecture and 54 hours lab per term. This course covers the diagnosis and control of parasitic and non-parasitic disease problems in ornamental landscapes. This course also involves determination of insects, mites, and other pest problems affecting ornamental plantings and the methods employed in control. Laboratory and field trips will be utilized to observe various problems in production areas. Transfer credit to colleges offering similar courses. (Degree Credit) (CSU)
- HORT 218 F Landscape Hydraulics** **3 Units**  
*Prerequisite(s):* HORT 153 F  
36 hours lecture and 54 hours lab per term. This course covers the principles of hydraulics related to open and closed piping systems, pipe and channel flow as applied to landscape irrigation and drainage system. It includes problems in water, storage, pumping system, surge and water hammer, fountains and ponds. (Degree Credit) (CSU)
- HORT 219 F CAD Applications in Horticulture** **3 Units**  
36 hours lecture and 54 hours lab per term. This course includes the use of computer aided drafting in the creation of landscape and irrigation designs. The use of symbol libraries, layered drawings, macros, and different drawing programs are included. Detail drawings, landscape and irrigation plans will be developed for actual site situations. (Degree Credit) (CSU)

**HORT 250 F Permaculture Design 5 Units**

72 hours lecture and 54 hours lab per term. This course introduces students to the application of ecological and environmental principles to designing human systems that are locally sustainable and require reduced inputs. Upon completion of this course with a passing grade, the student will receive a Permaculture Design Certificate, recognized worldwide. (Degree Credit) (CSU)

**HORT 255 F Hydroponics - Aquaponics 3 Units**

36 hours lecture and 54 hours lab per term. This course covers the principles and practices used in hydroponic and aquaponics systems. Special attention is given to system design and production of appropriate crops for small scale production. (Degree Credit) (CSU)

**HORT 257 F Soil Food Web 3 Units**

36 hours lecture and 54 hours lab per term. This course introduces students to the Soil Food Web. The Soil Food Web is a complex living system in the soil. This course examines soil organisms and their relationship to soil fertility. Methods will be explored to increase soil fertility using actively aerated compost teas. Quantitative and qualitative analysis of soil organisms through microscopy will be emphasized. (Degree Credit) (CSU)

**HORT 920 F Advanced CAD Applications in Horticulture 3 Units**

**Prerequisite(s):** HORT 219 F

36 hours lecture and 54 hours lab per term. This course covers the use of LandCADD computer aided drafting and design program in the creation of 2-D and 3-D landscape and irrigation designs. It also includes the use of customized plant and irrigation symbols, intelligent drawing blocks, cross-referenced drawings and paper space/model space. Detail drawings, complex irrigation and grading plans will be developed for actual site situations. Presentation 2-dimensional and 3-dimensional rendered drawings and animated walk-throughs are developed using advanced tools in LandCADD. Pass/No Pass or Letter Grade option. (Degree Credit)

## Greenhouse and Nursery Production Certificate

### Requirements

**PROGRAM CODE:** 2C15845

The **Greenhouse and Nursery Production Certificate** prepares students for entry level positions in the greenhouse and nursery industry, including both wholesale and retail nursery operations. This certificate requires the completion of 30-31 units of which 12 units are in required courses. An additional 9 units must be chosen from restricted electives group A and 9-10 units from restricted electives Group B. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (12 units):</b>		
HORT 160 F	Plant ID and Ornamental Trees	3
HORT 161 F	Plant ID/Ornamental Shrubs	3
HORT 164 F	Plant Identification - Annuals, Perennials and Houseplants	3
HORT 173 F	Greenhouse and Nursery Production	3
<b>Restricted Electives - Group A (9 units):</b>		
HORT 155 F	Soils	3
HORT 177 F	Turf Grass Management	3
HORT 174 F	Plant Propagation	3
HORT 205 F	Applied Entomology	3

**Restricted Electives - Group B (9-10 units): 9-10**

HORT 152 F	Applied Botany	4
HORT 162 F	Landscaping for Dry Climates	3
HORT 177 F	Turf Grass Management	3
HORT 200 F	Landscape Design	3
HORT 207 F	Plant Pathology	3

**Total Units 30-31**

## Program Student Learning Outcomes

**Outcome 1:** Apply horticultural concepts to real-world problems and solutions.

## Landscape Design/Management Certificate

### Requirements

**PROGRAM CODE:** 2C21252

The **Landscape Design/Management Certificate** prepares a student for entry level positions in the landscape design or landscape maintenance industry. The hands-on classes also provide the skills necessary for self-employment in the landscape design or landscape management industry. The Landscape Design/Management Certificate Program requires completion of 30-35 units of which 6 units are in required courses. An additional 24-29 units must be completed from four categories as restricted electives. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (6 units):</b>		
HORT 153 F	Landscape Irrigation	3
HORT 177 F	Turf Grass Management	3
<b>Restricted Electives (24-29 units) 24-29</b>		
<b>Category A (6 units):</b>		
(Students must complete either HORT 005 F and HORT 006 F sequence or the HORT 160 F and HORT 161 F sequence.)		
HORT 005 F	Basic Landscape Plants I	3
and		
HORT 006 F	Basic Landscape Plants II	3
or		
HORT 160 F	Plant ID and Ornamental Trees	3
and		
HORT 161 F	Plant ID/Ornamental Shrubs	3
<b>Category B (3-4 units):</b>		
(Students must complete either HORT 165 F or HORT 200 F.)		
HORT 165 F	Landscape Management	3-4
or HORT 200 F Landscape Design		
<b>Category C (7-10 units):</b>		
(Students must complete a minimum of 7 units from the following list.)		
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3
or HIST 112HF Honors World Civilizations to 1550 (formerly Honors World Civilizations I)		
HORT 155 F	Soils	3

HORT 156 F	Plant Nutrition	2
HORT 168 F	Landscape Construction	3
HORT 169LF	Landscape Construction Laboratory	1
HORT 170 F	Landscaping Contracting	3
HORT 201 F	Advanced Landscape Design	3
HORT 215 F	Diseases/Pests Ornament Plants	4
<b>Category D (8-9 units):</b>		
(Students must complete a minimum of 8 units from the following)		
HORT 162 F	Landscaping for Dry Climates	3
HORT 164 F	Plant Identification - Annuals, Perennials and Houseplants	3
HORT 185 F	Arboriculture	2
HORT 205 F	Applied Entomology	3
HORT 207 F	Plant Pathology	3
<b>Total Units</b>		<b>30-35</b>

## Program Student Learning Outcomes

*Outcome 1: Apply horticultural concepts to real-world problems and solutions.*

# Landscape Horticulture Certificate

Division: Natural Sciences

## Requirements

PROGRAM CODE: 2C00027

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **Landscape Horticulture Certificate** program is intended for students who desire an intermediate certification in horticulture. This certificate can be completed within a single school year. Courses used here can be applied toward the more advanced Certificates of Proficiency in Horticulture. This certificate requires a total of 18 units of which 7 units are in required courses. An additional 11 units must be chosen from the restricted units listed below.

Code	Title	Units
<b>Required Courses (7 units):</b>		
<b>7</b>		
HORT 001 F	Principles of Horticulture I	4
or HORT 002 F	Principles of Horticulture II	
HORT 005 F	Basic Landscape Plants I	3
HORT 006 F	Basic Landscape Plants II	3
HORT 160 F	Plant ID and Ornamental Trees	3
HORT 161 F	Plant ID/Ornamental Shrubs	3
HORT 162 F	Landscaping for Dry Climates	3
HORT 164 F	Plant Identification - Annuals, Perennials and Houseplants	3
<b>Restricted Electives (11 units):</b>		
<b>11</b>		
HORT 008AF	Landscape Pruning Techniques	1
HORT 008BF	Basic Turf Care	1
HORT 008CF	Home Pest Control	1
HORT 058 F	Irrigation Controller Programming	2
HORT 153 F	Landscape Irrigation	3

HORT 155 F	Soils	3
HORT 156 F	Plant Nutrition	2
HORT 157 F	Irrigation Principles	3
HORT 165 F	Landscape Management	4
HORT 168 F	Landscape Construction	3
HORT 169LF	Landscape Construction Laboratory	1
HORT 170 F	Landscaping Contracting	3
HORT 173 F	Greenhouse and Nursery Production	3
HORT 174 F	Plant Propagation	3
HORT 177 F	Turf Grass Management	3
HORT 185 F	Arboriculture	2
HORT 200 F	Landscape Design	3
<b>Total Units</b>		<b>18</b>

# Landscape Irrigation Certificate

## Requirements

PROGRAM CODE: 2C08383

The **Landscape Irrigation Certificate** Program requires a total of 30-31 units of which 18 units are in required courses. An additional 12-13 units must be chosen from the restricted units listed below, 6 units from Category A, and 6-7 units from Category B.

Code	Title	Units
<b>Required Courses (18 units):</b>		
HORT 153 F	Landscape Irrigation	3
HORT 154 F	Irrigation Design	3
HORT 155 F	Soils	3
HORT 157 F	Irrigation Principles	3
HORT 162 F	Landscaping for Dry Climates	3
HORT 218 F	Landscape Hydraulics	3
<b>Restricted Electives - Group A</b>		
<i>Select 6 units from the following:</i>		
<b>6</b>		
ARCH 113 F	Architectural Drawing I	3
CSTR 006 F	Residential Plumbing and Mechanical Systems	3
DART 100 F	Introduction to Digital Art	3
HORT 177 F	Turf Grass Management	3
HORT 200 F	Landscape Design	3
HORT 219 F	CAD Applications in Horticulture	3
<b>Restricted Electives - Group B</b>		
<i>Select 6-7 units from the following:</i>		
<b>6-7</b>		
HORT 165 F	Landscape Management	4
HORT 169LF	Landscape Construction Laboratory	1
HORT 170 F	Landscaping Contracting	3
HORT 201 F	Advanced Landscape Design	3
<b>Total Units</b>		<b>30-31</b>

## Program Student Learning Outcomes

*Outcome 1: Apply horticultural concepts to real-world problems and solutions.*

## Landscape Management Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03817

The **Landscape Management Associate in Science Degree** is designed to prepare students for possible careers in landscape management and/or employment in parks, golf courses, landscape contracting, and landscape gardening. This degree will also prepare the student to transfer to an appropriate four-year college or university. This degree requires a total of 18-21 units.

Code	Title	Units
<b>Required Courses - Select from the following list (18-21 units): 18-21</b>		
BIOL 268 F	General Botany	5
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HORT 001 F	Principles of Horticulture I	4
HORT 002 F	Principles of Horticulture II	4
HORT 005 F	Basic Landscape Plants I	3
HORT 006 F	Basic Landscape Plants II	3
HORT 152 F	Applied Botany	4
HORT 153 F	Landscape Irrigation	3
HORT 155 F	Soils	3
HORT 156 F	Plant Nutrition	2
HORT 160 F	Plant ID and Ornamental Trees	3
HORT 161 F	Plant ID/Ornamental Shrubs	3
HORT 162 F	Landscaping for Dry Climates	3
HORT 165 F	Landscape Management	4
HORT 177 F	Turf Grass Management	3
HORT 200 F	Landscape Design	3
HORT 215 F	Diseases/Pests Ornament Plants	4
<b>Total Units</b>		<b>18-21</b>

### Program Student Learning Outcomes

**Outcome 1:** Apply horticultural concepts to real-world problems and solutions.

**Outcome 2:** Identify plants, abiotic components, and horticulturally-significant insects.

**Outcome 3:** Demonstrate an understanding of the biology of plants, abiotic components, and horticulturally-significant insects.

## Nursery Management Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03816

The **Nursery Management Associate in Arts Degree** and entry-level positions in retail and wholesale nurseries, parks departments, and landscape contracting. A total of 18 units is required.

Code	Title	Units
<b>Required Courses (18 units): 18</b>		
HORT 001 F	Principles of Horticulture I	4
HORT 002 F	Principles of Horticulture II	4
HORT 152 F	Applied Botany	4
HORT 153 F	Landscape Irrigation	3
HORT 155 F	Soils	3
HORT 156 F	Plant Nutrition	2
HORT 160 F	Plant ID and Ornamental Trees	3
HORT 161 F	Plant ID/Ornamental Shrubs	3
HORT 162 F	Landscaping for Dry Climates	3
HORT 164 F	Plant Identification - Annuals, Perennials and Houseplants	3
HORT 173 F	Greenhouse and Nursery Production	3
HORT 174 F	Plant Propagation	3
HORT 200 F	Landscape Design	3
HORT 215 F	Diseases/Pests Ornament Plants	4
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Apply horticultural concepts to real-world problems and solutions.

**Outcome 2:** Identify plants, abiotic components, and horticulturally-significant insects.

**Outcome 3:** Demonstrate an understanding of the biology of plants, abiotic components, and horticulturally-significant insects.

## Ornamental Horticulture Associate in Science Degree

### Requirements

PROGRAM CODE: 2S10606

Curriculum leads to the **Ornamental Horticulture Associate in Science Degree**. This degree requires completion of 21 units of which 9 units are in required courses. An additional 12 units must be chosen from the restricted electives listed below.

Code	Title	Units
<b>Required Courses - Select from the following list (9 units): 9</b>		
HORT 153 F	Landscape Irrigation	3
HORT 157 F	Irrigation Principles	3
HORT 155 F	Soils	3
HORT 160 F	Plant ID and Ornamental Trees	3
HORT 161 F	Plant ID/Ornamental Shrubs	3
HORT 162 F	Landscaping for Dry Climates	3
HORT 164 F	Plant Identification - Annuals, Perennials and Houseplants	3
<b>Restricted Electives - Select from the following list (12 units): 12</b>		
HORT 156 F	Plant Nutrition	2

HORT 165 F	Landscape Management	4
HORT 173 F	Greenhouse and Nursery Production	3
HORT 174 F	Plant Propagation	3
HORT 177 F	Turf Grass Management	3
HORT 200 F	Landscape Design	3
HORT 201 F	Advanced Landscape Design	3
HORT 219 F	CAD Applications in Horticulture	3
<b>Total Units</b>		<b>21</b>

## Program Student Learning Outcomes

**Outcome 1:** Apply horticultural concepts to real-world problems and solutions.

**Outcome 2:** Identify plants, abiotic components, and horticulturally-significant insects.

**Outcome 3:** Demonstrate an understanding of the biology of plants, abiotic components, and horticulturally-significant insects.

## Ornamental Horticulture Certificate

Division: Natural Sciences

### Requirements

PROGRAM CODE: 2C10606

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **Ornamental Horticulture Certificate** program requires 30 units of which 9 units are in required courses. An additional 12 units must be chosen from restricted electives group A, and at least 9 units from restricted electives group A or B.

Code	Title	Units
<b>Required Courses (9 units):</b>		
HORT 005 F	Basic Landscape Plants I	3
HORT 006 F	Basic Landscape Plants II	3
or HORT 160 F	Plant ID and Ornamental Trees	
HORT 155 F & HORT 161 F	Soils and Plant ID/Ornamental Shrubs	6
<b>Restricted Electives - Group A (12 units):</b>		
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3
HORT 001 F	Principles of Horticulture I	4
HORT 002 F	Principles of Horticulture II	4
HORT 152 F	Applied Botany	4
HORT 153 F	Landscape Irrigation	3
HORT 156 F	Plant Nutrition	2
HORT 164 F	Plant Identification - Annuals, Perennials and Houseplants	3
HORT 173 F	Greenhouse and Nursery Production	3
HORT 174 F	Plant Propagation	3
HORT 177 F	Turf Grass Management	3
HORT 200 F	Landscape Design	3
HORT 205 F	Applied Entomology	3
HORT 207 F	Plant Pathology	3

HORT 215 F	Diseases/Pests Ornament Plants	4
<b>Restricted Electives - Group B (9 units):</b>		
HORT 008AF	Landscape Pruning Techniques	1
HORT 008BF	Basic Turf Care	1
HORT 008CF	Home Pest Control	1
HORT 045 F	Pest Control Certification and Safety	3
HORT 162 F	Landscaping for Dry Climates	3
HORT 165 F	Landscape Management	4
HORT 170 F	Landscaping Contracting	3
HORT 185 F	Arboriculture	2
HORT 201 F	Advanced Landscape Design	3
<b>Total Units</b>		<b>30</b>

## Program Student Learning Outcomes

**Outcome 1:** Apply horticultural concepts to real-world problems and solutions.

## Pest Management Certificate

### Requirements

PROGRAM CODE: 2C03818

The **Pest Management Certificate** Program prepares students for licensing and employment as pest control applicators and advisors. The Pest Management Certificate Program requires a total of 30 units of which 10 are in required courses. An additional 8 units must be chosen from restricted units from restricted electives group A, and at least 12 units from restricted electives group A or B.

Code	Title	Units
<b>Required Courses (10 units):</b>		
HORT 045 F	Pest Control Certification and Safety	3
HORT 188 F	Integrated Pest Management	2
HORT 205 F	Applied Entomology	3
HORT 207 F	Plant Pathology	3
<b>Restricted Electives - Group A</b>		
<i>Select 8-12 units from the following:</i>		<i>8-12</i>
HORT 001 F	Principles of Horticulture I	4
HORT 002 F	Principles of Horticulture II	4
HORT 005 F	Basic Landscape Plants I	3
HORT 006 F	Basic Landscape Plants II	3
HORT 046 F	Pest Safety for Landscape Work	2
HORT 152 F	Applied Botany	4
HORT 156 F	Plant Nutrition	2
HORT 160 F	Plant ID and Ornamental Trees	3
HORT 161 F	Plant ID/Ornamental Shrubs	3
HORT 215 F	Diseases/Pests Ornament Plants	4
<b>Restricted Electives - Group B</b>		
<i>Select 8-12 units from the following:</i>		<i>8-12</i>
HORT 155 F	Soils	3
HORT 165 F	Landscape Management	4
HORT 177 F	Turf Grass Management	3
HORT 185 F	Arboriculture	2

HORT 200 F	Landscape Design	3
<b>Total Units</b>		<b>27-35</b>

## Program Student Learning Outcomes

**Outcome 1:** Apply horticultural concepts to real-world problems and solutions.

## Industrial Drafting

Division: Technology and Engineering

### Faculty

Dan Carter

### Degrees and Certificates

- Industrial Drafting - Level I Certificate (p. 367)
- Industrial Drafting - Level II Certificate (p. 368)
- Industrial Drafting Associate in Science Degree (p. 368)

### Courses

#### **DRAF 101 F Blueprint Reading for Manufacturing (formerly DRAF 070 F)** **2 Units**

36 hours lecture per term. This basic print reading course is designed to prepare Machine Tool, Welding, Engineering, and Metal Fabrication students to interpret drawings related to manufacturing. This course explains the importance of engineering drawings in the manufacturing environment. This course covers the basic elements of a blueprint and introduces the concepts to successfully interpret engineering drawings. This course covers the principles of shop sketching, basic review of shop mathematics, and use of common measuring tools. A study of dimensioning and drawing symbols will be included. (CSU) (Degree Credit)

#### **DRAF 140 F AutoCAD for Industry** **3 Units**

**Advisory:** DRAF 171 F.

45 hours lecture and 27 hours lab per term. This is a comprehensive introduction to AutoCAD designed for practicing drafters, engineers, and other manufacturing oriented persons. Topics include hardware requirements and operation, database management, terminology, 2D AutoCAD drawing commands, plotting, symbol libraries, and dimensioning commands. Field trips may be optional outside of regularly-scheduled class times. (CSU) (Degree Credit)

#### **DRAF 141 F Advanced CAD for Industry** **3 Units**

**Prerequisite(s):** DRAF 140 F with a grade of C or better or previous experience.

45 hours lecture and 27 hours lab per term. This is an advanced course in computer aided design (CAD) using AutoCAD. Students will learn advanced industrial drafting concepts while strengthening their CAD skills. Emphasis will be on drafting and design areas such as fasteners, auxiliary view, isometric view, development layout, scaling and paperspace. A "2D" approach to AutoCAD will be used. (CSU) (Degree Credit)

#### **DRAF 143 F 3D Applications Using AutoCAD** **3 Units**

**Prerequisite(s):** DRAF 140 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This course is designed for the experienced AutoCAD user who needs a working knowledge of AutoCAD's 3D environment. Topics will include an introduction to 3D applications, the 3D coordinate system, display control wire frame modeling, surface modeling, solids modeling, analysis of a solids model (mass properties), model rendering, hardcopy output, and 2D/3D transfer. This course will be taught with an emphasis on mechanical drafting applications. (CSU) (Degree Credit)

#### **DRAF 171 F Fundamentals of Drafting** **2 Units**

18 hours lecture and 54 hours lab per term. This is a beginning drafting course that will introduce the proper use of drafting instruments, lettering, geometric construction, pictorial drawings, orthographic projection, dimensions, single-auxiliary views and sections. Emphasis is placed on line quality and lettering as well as some problems drawn from the industrial field. (CSU) (Degree Credit)

#### **DRAF 173 F Geometric Dimensioning and Tolerancing** **2 Units**

**Advisory:** DRAF 101 F.

36 hours lecture per term. This is an introductory course in the application and interpretation of geometric dimensioning and tolerancing concepts per the latest revision of the American Society of Mechanical Engineers (ASME) standard #Y14.5-2018. This course is designed for persons working in the fields of drafting, machining, manufacturing and quality control. (Degree Credit) (CSU)

#### **DRAF 944 F Solidworks** **3 Units**

45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concept, practice, and development of feature based solid modeling using popular solid modeling software. Students will demonstrate the features of the software by creating parametric solid models. (Degree Credit)

#### **DRAF 945 F Advanced Solidworks** **3 Units**

**Prerequisite(s):** DRAF 944 F with a grade of C or better

45 hours lecture and 37 hours lab per term. This course provides the student with advanced instruction in the concept, practice, and development of feature-based solid modeling using Solidworks software. Students will demonstrate the features of the software by creating advanced 3D parametric solid models, assemblies and 2D hardcopy layouts. (Degree Credit)

## Industrial Drafting - Level I Certificate

Division: Technology and Engineering

### Requirements

**PROGRAM CODE:** 2C10622A

The **Industrial Drafting - Level I Certificate** is designed to prepare students to work as computer-aided drafters/designers in industry and to upgrade the skills of persons presently employed as drafts/designers. This certificate requires a total of 20 units. At least half of the units towards this certificate must be completed at Fullerton College. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (20 units):</b>		
ARCH 124 F	Architectural CAD I	3

DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 140 F	AutoCAD for Industry	3
DRAF 171 F	Fundamentals of Drafting	2
DRAF 173 F	Geometric Dimensioning and Tolerancing	2
MACH 116 F	Machine Tools	2
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
or MACH 154 F	CNC Programming Using Surfcam (formerly MACH 060 F)	
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
<b>Total Units</b>		<b>20</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate productive use of CAD software menus and commands for creating graphic solutions to 2D mechanical and industrial drafting problems, conforming to the latest industry standards.

**Outcome 2:** Demonstrate proper use of a printer/plotter to produce hard copy output of drawing to scale.

## Industrial Drafting - Level II Certificate

### Requirements

PROGRAM CODE: 2C10623A

The **Industrial Drafting - Level II Certificate** is designed for students who have completed Level I and wish to learn advanced technical drafting skills required in the industry. Drafters use software to convert the designs of engineers and others into technical drawings. Drafters proficient in technical drawings and CAD are likely to have better job opportunities. This certificate requires completion of the Industrial Drafting-Level I Certificate plus additional advanced courses for Level II, for a total of 41 units. At least one half of the units toward the certificate must be completed at Fullerton College. A minimum grade of C is required in each course taken.

Code	Title	Units
<b>Required Courses from Level I (20 units):</b>		
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 140 F	AutoCAD for Industry	3
DRAF 171 F	Fundamentals of Drafting	2
DRAF 173 F	Geometric Dimensioning and Tolerancing	2
MACH 116 F	Machine Tools	2
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
or MACH 154 F	CNC Programming Using Surfcam (formerly MACH 060 F)	
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
ARCH 124 F	Architectural CAD I	3
<b>Required Courses for Level II (21 units):</b>		
DRAF 141 F	Advanced CAD for Industry	3
DRAF 944 F	Solidworks	3

DRAF 945 F	Advanced Solidworks	3
TECH 081 F	Technical Mathematics I	3
MACH 152 F	Advanced CNC Programming Using Mastercam (formerly MACH 052 F)	3
or MACH 156 F	Advanced CNC Programming Using Surfcam (formerly MACH 062 F)	
TECH 108 F	Manufacturing Processes	3
METL 192 F	Fundamentals of Metallurgy	3
<b>Total Units</b>		<b>41</b>

## Program Student Learning Outcomes

**Outcome 1:** Define technical terms associated with 3D CAD modeling.

**Outcome 2:** Create template drawings incorporating the use of Paperspace with default settings and scales appropriate for industry standard drawings.

## Industrial Drafting Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03840A

The **Industrial Drafting Associate in Science Degree** provides the skills and knowledge for those who wish to pursue a career as a Mechanical Engineer or CAD operator/designer in fields related to engineering, tool design, and 3D Parametric Modeling in a manufacturing environment as well as other fields. This degree requires a total of 29 units listed below. At least half of the units towards the major must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (29 units):</b>		
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 140 F	AutoCAD for Industry	3
DRAF 141 F	Advanced CAD for Industry	3
DRAF 143 F	3D Applications Using AutoCAD	3
DRAF 171 F	Fundamentals of Drafting	2
DRAF 173 F	Geometric Dimensioning and Tolerancing	2
DRAF 944 F	Solidworks	3
MACH 116 F	Machine Tools	2
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
or MACH 154 F	CNC Programming Using Surfcam (formerly MACH 060 F)	
TECH 108 F	Manufacturing Processes	3
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
<b>Total Units</b>		<b>29</b>

## Program Student Learning Outcomes

**Outcome 1:** Communicate technical ideas through modeling and creation of technical drawings that fully describe a design idea.



**Outcome 2:** Describe information contained on blueprints including symbols and title block features.

## Industrial Technology

Division: Technology and Engineering

### Degrees/Certificates

Industrial Technology Associate in Science Degree (p. 369)

## Industrial Technology Associate in Science Degree

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2S13207

The **Industrial Technology Associate in Science Degree** is designed to give students a broad understanding of communications, business finance, graphics, construction, manufacturing, and transportation systems, as well as many other subjects that are found in today's industry. Students are given instructions in various skill areas that can be applied directly in the workforce, such as in the manufacturing of products; designing of products with computer-aided design (CAD) software; constructions of buildings; repairing of automobiles; printing; photography; and other communication media skills for various TV, film, internet, print shops, and entertainment industries. A variety of businesses and industries are in need of individuals who have the knowledge and flexibility to learn, implement and manage new technology within complex business environments.

Schools need well prepared industrial and technology education teachers to help educate and guide young men and women into high technology careers. On the business and industry side, Industrial Technology majors assume roles as "Industrial Technologists" in a wide variety of industrial and business settings and they understand managerial concepts and principles. Common to all Industrial Technologists is the focus on continuous improvement in the areas of productivity and quality. Technologists apply management theory and practice with technical skills to solve problems. Students typically go on to a 4 year institution to further their studies in specialties related to industry needs. At least one half of the units toward the degree must be completed at Fullerton College. This degree requires a total of 18-21.5 units.

Code	Title	Units
<b>Required Courses (18-21.5 units):</b>		
ACCT 100 F	Small Business Accounting	3
AUTO 131 F	Automotive Fundamentals	4.5
BUS 151 F	Business Mathematics	3
CRTV 118 F	Introduction to Radio, TV and Film	3
CSTR 100 F	Residential Construction	4
DRAF 171 F	Fundamentals of Drafting	2
MACH 116 F	Machine Tools	2
PHOT 101 F	Introduction to Photography	3
PRNT 101 F	Introduction to Printing	3
TECH 127 F	Industrial Safety	2

WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
<b>Total Units</b>		<b>18-21.5</b>

### Program Student Learning Outcomes

**Outcome 1:** Describe occupations typically found in each industry/technical area such as manufacturing, automotive, photography, construction, welding, printing and drafting.

**Outcome 2:** Apply theories and principles to solve technical and management problems.

**Outcome 3:** Design, test and analyze a system or process to meet desired needs.

**Outcome 4:** Apply good written, oral communication and presentation skills.

**Outcome 5:** Collect and interpret data to analyze and solve problems.

**Outcome 6:** Select and use computer applications software.

## Interdisciplinary Studies

### Degrees/Certificates

- Interdisciplinary Studies: Emphasis in Arts and Human Expression Associate in Arts Degree (p. 369)
- Interdisciplinary Studies: Emphasis in Science and Mathematics Associate in Arts Degree (p. 371)
- Interdisciplinary Studies: Emphasis in Social Behavior and Self-Development Associate in Arts Degree (p. 373)
- Interdisciplinary Studies: Emphasis in Social Sciences Associate in Arts Degree (p. 374)

## Interdisciplinary Studies: Emphasis in Arts and Human Expression Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A18164

**Interdisciplinary Studies with an Emphasis in Arts and Human Expression:**

These courses emphasize the study of cultural, literary, humanistic 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 will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments. This emphasis includes lower division coursework that prepares students for majors in fine arts, foreign languages, literature, and philosophy.

Code	Title	Units
<b>Select 18 units, including two or more disciplines, from the following list:</b>		
ART 100 F	Fundamentals of Art	3
ART 110 F	Introduction to Art	3
ART 112 F	Art History - Ancient to Medieval	3

ART 113 F	Art History - Renaissance to Modern	3	ENGL 208 F	Introduction to Film Studies	3
or ART 113HF	Honors Art History - Renaissance to Modern		ENGL 210 F	Introduction to Language Structure and Use	3
ART 114 F	Art History - Impressionism to Present	3	ENGL 211 F	British Literature to 1800	3
ART 115 F	The Museum Experience (formerly Museum Survey)	3	or ENGL 211HF	Honors British Literature to 1800	
ART 116 F	Art History - The Art of Mexico	3	ENGL 212 F	British Literature since 1800	3
ART 117 F	Art History - American Art	3	or ENGL 212HF	Honors British Literature since 1800	
ART 118 F	Color Theory	3	ENGL 221 F	American Literature to the Civil War	3
ART 120 F	Basic Design	3	or ENGL 221HF	Honors American Literature to the Civil War	
ART 121 F	Three-Dimensional Design	3	ENGL 222 F	American Literature from the Civil War to the Present	3
ART 127 F	Beginning Floral Painting (formerly Applied Painting - Floral)	2	or ENGL 222HF	Honors American Literature from the Civil War to the Present	
ART 153 F	Ceramics - Beginning Handbuilding (formerly ART 150AF)	3	ENGL 224 F	World Literature through the Early Modern Period	3
ART 154 F	Ceramics - Beginning Throwing	3	or ENGL 224HF	Honors World Literature through the Early Modern Period	
ART 160 F	Fundamentals of Sculpture	3	ENGL 225 F	World Literature since the Early Modern Period	3
ART 174 F	Beginning Jewelry Fabrication	3	or ENGL 225HF	Honors World Literature since the Early Modern Period	
ART 182 F	Basic Drawing	3	ENGL 234 F	Introduction to Shakespeare	3
ART 184 F	Expressive Drawing	3	or ENGL 234HF	Honors Introduction to Shakespeare	
ART 186 F	Beginning Life Drawing	3	ENGL 239 F	Survey of Children's Literature	3
ART 188 F	Beginning Watercolor Painting	3	ENGL 240 F	Survey of Young Adult Literature	3
ART 189 F	Beginning Painting	3	ENGL 243 F	Folklore and Mythology	3
ART 196HF	Honors Creative Arts - Art	3	or ENGL 243HF	Honors Folklore and Mythology	
ART 210 F	Life Painting	3	ENGL 245 F	The Bible as Literature	3
ART 211 F	Women in the Arts	3	ENGL 246 F	The Novel	3
ART 212 F	Art History - The Art of Asia	3	ENGL 248 F	Science Fiction	3
ART 213 F	Art History: Pre-Columbian Art	3	ENGL 249 F	Survey of Chicano/a Literature	3
CDES 242 F	Introduction to Liberal Studies	3	ENGL 251 F	Survey of Native American Literature	3
CHIN 101 F	Elementary Chinese - Mandarin I	5	ENGL 254 F	Intermediate Creative Writing: Poetry	3
CHIN 102 F	Elementary Chinese - Mandarin II	5	ENGL 255 F	Intermediate Creative Writing: Fiction	3
CHIN 203 F	Intermediate Chinese - Mandarin III	4	ETHS 130 F	African-American History I	3
CHIN 204 F	Intermediate Chinese - Mandarin IV	4	FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
COMM 100 F	Public Speaking	3	FASH 244 F	Ethnic Costume	3
COMM 105 F	Interpersonal Communication	3	FREN 101 F	Elementary French I	5
COMM 124 F	Small Group Communication	3	FREN 102 F	Elementary French II	5
COMM 135 F	Essentials of Argumentation	3	FREN 203 F	Intermediate French III	4
CRTV 120 F	Media Aesthetics	3	FREN 204 F	Intermediate French IV	4
CRTV 121 F	American Cinema to the 1960s	3	GERM 101 F	Elementary German I	5
CRTV 126AF	World Cinema to 1945	3	GERM 102 F	Elementary German II	5
CRTV 126BF	World Cinema 1946 to Present	3	GERM 203 F	Intermediate German III	4
CRTV 131 F	Contemporary American Cinema (formerly Contemporary Cinema)	3	GERM 204 F	Intermediate German IV	4
DANC 100 F	Dance Appreciation	3	HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I)	3
DANC 120 F	Dance History	3	or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
DANC 200 F	Dance Appreciation - A Classical Ballet Retrospective	3	HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II)	3
DANC 210 F	Multicultural Dance in the U.S. Today	3			
ENGL 102 F	Introduction to Literature	3			
or ENGL 102HF	Honors Introduction to Literature				
ENGL 105 F	Introduction to Creative Writing	3			
ENGL 203 F	Introduction to Dramatic Literature	3			
ENGL 204 F	Introduction to Poetry	3			
ENGL 207 F	The Short Story	3			

or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)			
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3		
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)			
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II)	3		
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)			
HIST 127 F	Survey of United States History (formerly Survey of American History)	3		
HIST 154 F	Ancient Egypt	3		
HIST 165 F	Introduction to the Middle East	3		
or HIST 165HF	Honors Introduction to the Middle East			
HIST 170 F	History of the United States to 1877 (formerly History of the United States I)	3		
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)			
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II)	3		
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)			
HIST 270 F	Women in United States History	3		
IDES 180 F	History of Architecture and Furnishings I (formerly History of Architecture I)	3		
ITAL 101 F	Elementary Italian I	5		
ITAL 102 F	Elementary Italian II	5		
ITAL 203 F	Intermediate Italian III	4		
ITAL 204 F	Intermediate Italian IV	4		
JAPN 101 F	Elementary Japanese I	5		
JAPN 102 F	Elementary Japanese II	5		
JAPN 203 F	Intermediate Japanese III	4		
JAPN 204 F	Intermediate Japanese IV	4		
MUS 101 F	Music Fundamentals	3		
MUS 102 F	Introduction to College Musicianship (formerly Music Reading)	1		
MUS 106 F	Introduction to College Music Theory	3		
MUS 107 F	Music Theory I (formerly Harmony)	3		
MUS 110 F	Electronic Music I: Beginning Music Production	3		
MUS 113 F	Jazz History - An Appreciation	3		
MUS 116 F	Music Appreciation	3		
MUS 118 F	Introduction to Opera	3		
MUS 119 F	History of Rock Music	3		
MUS 120 F	Survey of Music History	3		
MUS 196HF	Honors Creative Arts - Music	3		
PHIL 100 F	Introduction to Philosophy	3		
or PHIL 100HF	Honors Introduction to Philosophy			
PHIL 101 F	Introduction to Religious Studies	3		
PHIL 105 F	World Religions	3		
or PHIL 105HF	Honors World Religions			
PHIL 135 F	Social and Political Philosophy	3		
PHIL 160 F	Introduction to Ethics	3		
PHIL 195 F	Women's Issues in Philosophy	3		
PHIL 200 F	Introduction to Christianity	3		
PHIL 201 F	History of Philosophy - Ancient and Medieval	3		
PHIL 202 F	History of Philosophy - Modern and Contemporary	3		
PHIL 210 F	Introduction to Judaism	3		
PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3		
PHIL 250 F	The Religion of Islam	3		
PHIL 270 F	Introduction to Asian Religions	3		
PHOT 101 F	Introduction to Photography	3		
PHOT 111 F	Introduction to Photography from Analog to Digital	3		
PORT 101 F	Elementary Portuguese I	5		
PORT 102 F	Elementary Portuguese II	5		
SPAN 101 F	Elementary Spanish I	5		
or SPAN 101HF	Honors Elementary Spanish I			
SPAN 102 F	Elementary Spanish II	5		
or SPAN 102HF	Honors Elementary Spanish II			
SPAN 201 F	Spanish for the Spanish Speaker	5		
SPAN 203 F	Intermediate Spanish III	4		
SPAN 204 F	Intermediate Spanish IV	4		
SPAN 205 F	Introduction to Spanish Literature	3		
SPAN 206 F	Introduction to Latin American Literature	3		
SPAN 207 F	Children's Literature/Spanish	3		
THEA 100 F	Introduction to the Theatre	3		
THEA 104 F	Introduction to Theatre Appreciation	3		
THEA 105 F	Musical Theatre History	3		
THEA 106 F	Beginning Principles of Playwriting	3		
THEA 109 F	Modern Dramatic Literature	3		
THEA 127 F	Oral Interpretation	3		
THEA 160 F	Introduction to Sound Technology	3		
THEA 196HF	Honors Creative Arts - Theatre	3		
<b>Total Units</b>				<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Create written and spoken works that demonstrate effective communication and critical thinking skills.

**Outcome 2:** Demonstrate a critical understanding, appreciate and expression of artistic and cultural sensibilities in historical and contemporary contexts.

## Interdisciplinary Studies: Emphasis in Science and Mathematics Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A18163

**Interdisciplinary Studies with an Emphasis in Science and Mathematics:** These courses emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also

examine the influence that the acquisition of scientific knowledge has on human experience. This emphasis includes lower-division coursework that prepares students for majors in science, math, and health related fields.

**Code Title Units**  
**Select at least one course from each category (A and B) and then complete additional courses in categories A and/or B to total 18 units:**

**A) Sciences**

ANAT 231 F	General Human Anatomy	4
ANAT 240 F	Human Physiology	5
ANTH 101 F	Physical Anthropology	3
or ANTH 101HF	Honors Physical Anthropology	
ANTH 101LF	Physical Anthropology Lab	1
BIOL 100 F	Principles of Biology	4
BIOL 101 F	General Biology	5
or BIOL 101HF	Honors General Biology	
BIOL 102 F	Human Biology	3
BIOL 102LF	Human Biology Laboratory	1
BIOL 104 F	Biology of Insects and Spiders	3
BIOL 108 F	Plants and People	3
BIOL 109 F	Genetics and Biotechnology in Society	3
BIOL 109LF	Biotechnology Lab Techniques	2
BIOL 141 F	Marine Mammal Biology and Conservation	3
BIOL 170 F	Organismal Biology	5
BIOL 190 F	Introduction to Biotechnology	3
BIOL 190LF	Introduction to Biotechnology Lab	1
BIOL 222 F	Marine Biology	3
BIOL 266 F	General Zoology	5
BIOL 268 F	General Botany	5
BIOL 272 F	Cell and Molecular Biology	4
BIOL 274 F	General Ecology	4
CHEM 100 F	Chemistry for Daily Life	4
CHEM 101 F	Chemistry for Allied Health Science	5
CHEM 103 F	Chemistry in a Changing World	3
CHEM 107 F	Preparation for General Chemistry	5
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
ESC 100 F	Physical Geology	3
ESC 100LF	Physical Geology Lab	1
ESC 101 F	Earth Science Survey	3
ESC 101LF	Earth Science Survey Lab	1
ESC 103 F	Historical Geology	4
ESC 104 F	Geology of National Parks and Monuments	3
ESC 105 F	Introduction to Weather and Climate	3
ESC 105LF	Introduction to Weather and Climate Laboratory	1
ESC 106 F	Geology of Orange County Area	2
ESC 107 F	Earth Science for Educators	4
ESC 110 F	Introduction to Climate Science	3
ESC 116 F	Astronomy	3
or ESC 116HF	Honors Astronomy	
ESC 116LF	Astronomy Lab	2

ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 130LF	Introduction to Oceanography: Field Experience	1
ESC 190 F	Environmental Geology	3
ENVS 105 F	Environmental Biology	3
ENVS 105LF	Environmental Biology Lab	1
GEOG 102 F	Physical Geography	3
or GEOG 102HF	Honors Physical Geography	
GEOG 102LF	Physical Geography Laboratory	1
HED 140 F	Health Science	3
HORT 152 F	Applied Botany	4
HORT 205 F	Applied Entomology	3
HORT 207 F	Plant Pathology	3
MICR 220 F	Medical Microbiology	4
MICR 262 F	General Microbiology	5
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
PHYS 120 F	Relativity for Poets	3
PHYS 130 F	Elementary Physics	4
PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II	4
PHYS 210 F	Physics with Calculus for the Life Sciences I	4
PHYS 211 F	Physics with Calculus for the Life Sciences II	4
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
<b>B) Mathematics</b>		
BUS 101 F	Personal Financial Management	3
BUS 151 F	Business Mathematics	3
MATH 100 F	Liberal Arts Mathematics	3
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
MATH 121 F	Enhanced Introductory Probability and Statistics	5
MATH 129 F	College Algebra for Business Calculus	4
MATH 130 F	Calculus for Business	4
MATH 141 F	College Algebra	4
or MATH 141HF	Honors College Algebra	
MATH 142 F	Trigonometry	4
MATH 143 F	Enhanced College Algebra	5
MATH 151 F	Calculus I (formerly MATH 150AF)	4
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
MATH 170 F	Discrete Structures	4
MATH 171 F	Discrete Mathematics	4
MATH 172 F	Graph Theory and Linear Algebra	4
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4

MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
PSY 161 F	Elementary Statistics for Behavioral Science	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
SOSC 120 F	Introduction to Probability and Statistics	4
<b>Total Units</b>		<b>18</b>

## Interdisciplinary Studies: Emphasis in Social Behavior and Self-Development Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A18166

**Interdisciplinary Studies: Emphasis in Social Behavior and Self-Development Associate in Arts Degree** - These courses provide students knowledge and understanding of social behavior and self-development. This area of emphasis is designed to prepare students to use their understanding of themselves and others to communicate and collaborate more effectively. It combines knowledge of theory with attention to personal growth and purpose, as well as health and wellness. Students learn to become citizens who care for themselves and others, ready to work with people in their communities. Participation in group activities and collaborative projects is a central focus of this emphasis, allowing students to experience group interactions in a variety of contexts. This emphasis includes lower division coursework that prepares students for social/health/human services majors and careers in people/community oriented professions including social, health and recreational services. Veteran's Military Credit (DD214) Fullerton College will accept a veteran's DD-214 for credit towards Fullerton's Interdisciplinary Studies: Social Behavioral and Self-Development Associate in Arts degree as follows: 3 units for Area C) Health and Wellness.

**Code Title Units**  
**Select at least one course from each category below (A, B, and C). Then complete additional courses from categories A, B, and/or C to reach a total of 18 units:**

#### A) Theory and Knowledge

ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF	Honors Cultural Anthropology	
ANTH 105 F	Language and Culture	3
BUS 266 F	Human Relations in Organizations (formerly Human Relations in Business)	3
CDES 120 F	Child Development	3
CDES 140 F	Infant and Toddler Development and Observation	3
CDES 201 F	Child in the Home and Community	3
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
COMM 100 F	Public Speaking	3

COMM 105 F	Interpersonal Communication	3
COMM 120 F	Intercultural Communication	3
COMM 124 F	Small Group Communication	3
COMM 135 F	Essentials of Argumentation	3
ETHS 101 F	American Ethnic Studies	3
or ETHS 101HF	Honors American Ethnic Studies	
ETHS 111 F	Women of Color in the U.S.	3
ETHS 129 F	Introduction to African-American Studies	3
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	
ETHS 159 F	Introduction to American Indian Studies	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
ETHS 171 F	Asian Pacific Islander American History	3
ETHS 235 F	Contemporary Social Justice Movements	3
or ETHS 235HF	Honors Contemporary Social Justice	
GEOG 160 F	Cultural Geography	3
HIST 127 F	Survey of United States History (formerly Survey of American History)	3
HIST 170 F	History of the United States to 1877 (formerly History of the United States I)	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II)	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
HIST 270 F	Women in United States History	3
HIST 275 F	History of California	3
PE 244 F	Techniques and Principles of Coaching	3
PE 250 F	Sports and Society	3
POSC 100 F	American Government	3
or POSC 100HF	Honors American Government	
POSC 110 F	Contemporary American Politics	3
or POSC 110HF	Honors Contemporary American Politics	
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
PSY 110 F	Introduction to Applied Psychology	3
PSY 120 F	Human Sexuality	3
PSY 131 F	Cross Cultural Psychology	3
PSY 139 F	Developmental Psychology - Life Cycle	3
PSY 145 F	Child Psychology	3
PSY 202 F	Research Methods in Psychology	4
or PSY 202HF	Honors Research Methods in Psychology	

PSY 221 F	The Brain and Behavior	3
PSY 222 F	Abnormal Psychology	3
PSY 251 F	Social Psychology	3
or PSY 251HF	Honors Social Psychology	
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
SOC 102 F	Social Problems	3
SOC 201 F	Dying and Death	3
SOC 230 F	Sociology of Gender	3
or SOC 230HF	Honors Sociology of Gender	
SOC 250 F	Sociology of Aging	3
SOC 275 F	Marriage and Family	3
or SOC 275HF	Honors Marriage and Family	
SOC 277 F	Sociology of Religion	3
or SOC 277HF	Honors Sociology of Religion	
SOC 280 F	Media, Culture and Society	3
SOC 285 F	Drugs and Society	3
or SOC 285HF	Honors Drugs and Society	
SOC 290 F	Sociology of Race and Ethnicity	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	
SOC 292 F	Introduction to Criminology	3
or SOC 292HF	Honors Introduction to Criminology	
SOSC 125 F	Introduction to Research Methods	3
SOSC 130 F	Introduction to LGBTQ Studies	3
WMNS 100 F	Introduction to Women's Studies	3
or WMNS 100HF	Honors Introduction to Women's Studies	

Select at least one course from each category below (A, B, and C). Then complete additional courses from categories A, B, and/or C to reach a total of 18 units:

#### B) Growth and Purpose

COUN 101 F	The College Experience	2
COUN 110 F	Teaching As A Career	3
COUN 135 F	Introduction to Leadership Development	3
COUN 140 F	Educational Planning	0.5
COUN 141 F	Career Exploration	1
COUN 143 F	Creative Job Search	1
COUN 144 F	Career Motivation and Self Confidence	1
COUN 148 F	Human Potential	1
COUN 151 F	Career and College Success (formerly Career/Life Planning)	3
COUN 152 F	Diversity in the World of Work	3
COUN 163 F	Personal Growth and Life Success	3
COUN 193 F	Financial Life Skills (formerly COUN 093 F)	2

Select at least one course from each category below (A, B, and C). Then complete additional courses from categories A, B, and/or C to reach a total of 18 units:

#### C) Health and Wellness

HED 140 F	Health Science	3
MIND 101 F	The Practice of Mindfulness and Self-Compassion	3
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
PE 243 F	Stress Management	3

PE 248 F	Psychology of Sport	3
PE 266 F	Fitness for Living (formerly Physical Fitness as a Lifelong Concept)	3

Select any physical education activity course.

WELL 230 F	The Body-Mind Connection	3
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**Total Units** **18**

## Program Student Learning Outcomes

**Outcome 1:** Identify, analyze and communicate an understanding of self and society through systematic investigation of social behavior, institutions, and culture.

**Outcome 2:** Demonstrate a critical understanding, appreciate and expression of philosophical and cultural sensibilities in historical and contemporary contexts.

## Interdisciplinary Studies: Emphasis in Social Sciences Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A18165

**Interdisciplinary Studies: Emphasis in Social Sciences Associate in Arts Degree:** These courses emphasize the perspective, concepts, theories and methodologies of the variety of disciplines that comprise study in the social sciences. Students will study human experience in the context of the larger society. Students will study how individuals, social subgroups, and societies operate in relation to each other. This emphasis includes lower division coursework that prepares students for majors in the social sciences.

Code	Title	Units
<b>Select 18 units of coursework, including two or more disciplines, from the following list:</b>		
ANTH 101 F	Physical Anthropology	3
or ANTH 101HF	Honors Physical Anthropology	
ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF	Honors Cultural Anthropology	
ANTH 103 F	Introduction to Archaeology	3
or ANTH 103HF	Honors Introduction to Archaeology	
ANTH 105 F	Language and Culture	3
ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	3
or ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	
ANTH 209 F	Cultures of Latin America	3
ANTH 211 F	Celtic Cultures	3
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 242 F	International Business Law	3
CDES 120 F	Child Development	3
COUN 151 F	Career and College Success (formerly Career/Life Planning)	3
COUN 152 F	Diversity in the World of Work	3

COUN 163 F	Personal Growth and Life Success	3	HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3
ECON 101 F	Principles of Economics - Micro	3	HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3
	or ECON 101HF Honors Principles of Economics - Micro		HIST 165 F	Introduction to the Middle East	3
ECON 102 F	Principles of Economics - Macro	3		or HIST 165HF Honors Introduction to the Middle East	
	or ECON 102HF Honors Principles of Economics-Macro		HIST 170 F	History of the United States to 1877 (formerly History of the United States I)	3
ETHS 101 F	American Ethnic Studies	3		or HIST 170HF Honors History of the United States to 1877 (formerly Honors History of the United States I)	
	or ETHS 101HF Honors American Ethnic Studies		HIST 171 F	History of the United States Since 1877 (formerly History of the United States II)	3
ETHS 111 F	Women of Color in the U.S.	3		or HIST 171HF Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
ETHS 129 F	Introduction to African-American Studies	3	HIST 190 F	History of the Americas I (formerly HIST 162AF)	3
ETHS 130 F	African-American History I	3	HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
ETHS 131 F	African-American History II	3	HIST 270 F	Women in United States History	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3	HIST 275 F	History of California	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3	JOUR 110 F	Mass Media Survey	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3		or JOUR 110HF Honors Mass Media Survey	
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3	POSC 100 F	American Government	3
	or ETHS 153HF Honors Chicana-o and Latina-o Contemporary Issues			or POSC 100HF Honors American Government	
ETHS 159 F	Introduction to American Indian Studies	3	POSC 110 F	Contemporary American Politics	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3		or POSC 110HF Honors Contemporary American Politics	
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3	POSC 120 F	Introduction to Political Theory	3
ETHS 171 F	Asian Pacific Islander American History	3	POSC 150 F	California Government and Politics	3
ETHS 235 F	Contemporary Social Justice Movements	3	POSC 200 F	Introduction to the Study of Politics	3
	or ETHS 235HF Honors Contemporary Social Justice		POSC 215 F	Comparative Politics	3
GEOG 100 F	Global Geography	3	POSC 216 F	Government and Politics of the Middle East	3
	or GEOG 100HF Honors Global Geography		POSC 220 F	Introduction to Public Administration	3
GEOG 120 F	Global Environmental Problems	3	POSC 230 F	Introduction to International Relations	3
GEOG 130 F	California Geography	3	POSC 275 F	Introduction to Public Law	3
GEOG 160 F	Cultural Geography	3	PSY 101 F	General Psychology	3
GEOG 262 F	Economic Geography	3		or PSY 101HF Honors General Psychology	
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I)	3	PSY 131 F	Cross Cultural Psychology	3
	or HIST 110HF Honors Western Civilizations to 1550 (formerly Western Civilization II)		PSY 145 F	Child Psychology	3
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II)	3	PSY 202 F	Research Methods in Psychology	4
	or HIST 111HF Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)			or PSY 202HF Honors Research Methods in Psychology	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3	PSY 221 F	The Brain and Behavior	3
	or HIST 112HF Honors World Civilizations to 1550 (formerly Honors World Civilizations I)		PSY 222 F	Abnormal Psychology	3
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II)	3	PSY 233 F	The Psychology of Adjustment	3
	or HIST 113HF Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)		PSY 251 F	Social Psychology	3
HIST 127 F	Survey of United States History (formerly Survey of American History)	3		or PSY 251HF Honors Social Psychology	
HIST 151 F	Survey of British History I	3	SOC 101 F	Introduction to Sociology	3
HIST 152 F	Survey of British History II	3		or SOC 101HF Honors Introduction to Sociology	
HIST 154 F	Ancient Egypt	3	SOC 102 F	Social Problems	3
			SOC 201 F	Dying and Death	3
			SOC 230 F	Sociology of Gender	3
				or SOC 230HF Honors Sociology of Gender	
			SOC 250 F	Sociology of Aging	3
			SOC 275 F	Marriage and Family	3
				or SOC 275HF Honors Marriage and Family	
			SOC 277 F	Sociology of Religion	3

or SOC 277HF	Honors Sociology of Religion	
SOC 280 F	Media, Culture and Society	3
SOC 285 F	Drugs and Society	3
or SOC 285HF	Honors Drugs and Society	
SOC 290 F	Sociology of Race and Ethnicity	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	
SOC 292 F	Introduction to Criminology	3
or SOC 292HF	Honors Introduction to Criminology	
SOSC 125 F	Introduction to Research Methods	3
WMNS 100 F	Introduction to Women's Studies	3
or WMNS 100HF	Honors Introduction to Women's Studies	
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify, analyze and communicate an understanding of self and society through systematic investigation of social behavior, institutions, and culture.

**Outcome 2:** Demonstrate a critical understanding, appreciation and expression of philosophical and cultural sensibilities in historical and contemporary contexts.

## Interior Design

Division: Technology and Engineering

### Faculty

Adriana Currie

### Degrees and Certificates

- Commercial Interior Design Certificate (p. 377)
- Interior Design Assistant Certificate (p. 378)
- Interior Design Associate in Science Degree (p. 378)
- Residential Interior Design Certificate (p. 379)

### Courses

#### IDES 085 F Kitchen and Bath Design **2 Units**

**Prerequisite(s):** IDES 110 Beginning Drafting for Interior Design.

18 hours lecture and 54 hours lab per term. This course covers functional planning for the kitchen and bath. The emphasis is on layout, materials, appliances and fixtures, lighting and electrical planning, design character, construction and plumbing. This course also covers trends and career options. (Degree Credit)

#### IDES 100 F Fundamentals of Interior Design **3 Units**

54 hours lecture per term. This course covers the application of design principles and elements in planning complete interior environments that meet individual, functional, legal and environmental needs. The design process will be emphasized including user requirements, design concept, basic space planning, furniture arrangement, color theory, and coordination of fabrics and surfaces. (CSU) (Degree Credit)

#### IDES 105 F Interior Design Studio I **2 Units**

**Advisory:** IDES 100 F.

18 hours lecture and 54 hours lab per term. This course is designed to apply concepts and theories presented in the lecture course, Fundamentals of Interior Design IDES 100 F. Emphasis is placed on the design process in developing solutions for interior design projects. Special attention is given to Design Principles and Elements; the application of color; coordination of furniture; and the selection of materials and finishes. There is individualized feedback during studio project work. Students participate in class presentations. (CSU) (Degree Credit)

#### IDES 110 F Drafting for Interior Design (formerly Drafting - Interior Design) **3 Units**

36 hours lecture and 54 hours lab per term. This course covers the development of drafting techniques and graphic skills for application in architectural drawings including floor plans, lighting and electrical plans, elevations, section drawings, and orthographic projection. Basic construction principles and terminology will be covered. (CSU) (Degree Credit)

#### IDES 130 F Applied Color and Design Theory **4 Units**

54 hours lecture and 54 hours lab per term. This course examines color and design theory and its application in developing solutions to interior design projects. The effects of cultural influences, physiology and psychology will be explored. (CSU) (Degree Credit)

#### IDES 147 F Office Planning **3 Units**

**Prerequisite(s):** IDES 110 F or ARCH 100 F with a grade of C or better.

36 hours lecture, 54 hours lab per term. This course will cover large and small office planning including client improvement practices and the use of modular systems. Also covered are code requirements and the use of electrical, plumbing and mechanical systems. (CSU) (Degree Credit)

#### IDES 150 F Interior Materials and Products **4 Units**

72 hours lecture per term. This course explores selection criteria, application and evaluation of products and materials used in commercial and residential interior design. Included are textiles, furnishings, finishes, sustainability standards and the LEED system. Field trips to manufacturers and vendors are an integral part of this course. (CSU) (Degree Credit)

#### IDES 170 F Space Planning I **3 Units**

**Prerequisite(s):** ARCH 124 F or IDES 110 F, with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course covers the design process for residential space planning, including remodeling, kitchen and bath design, furniture plan, materials and products selection, universal design, lighting and electrical plan, plumbing considerations and building code requirements.. (CSU) (Degree Credit)

#### IDES 175 F Space Planning II **3 Units**

**Prerequisite(s):** ARCH 124 F or IDES 110 F, with a grade of C or better

**Advisory:** IDES 170 F.

36 hours lecture and 54 hours lab per term. This course will cover the design process for designing a commercial interior including office systems, tenant improvement practices, the implementation of mechanical systems, building code requirements, lighting considerations, and universal design. (CSU) (Degree Credit)

#### IDES 180 F History of Architecture and Furnishings I (formerly History of Architecture I) **3 Units**

54 hours lecture per term. This course covers the historical relationship between the decorative arts, period furniture and interior architecture in this overview of design heritage from antiquity through the 19th century in France. Emphasis is placed on style development as it relates to social, economic and political influences. (CSU) (Degree Credit)



**IDES 190 F History of Architecture and Furnishings II (formerly History of Interior Architecture II) 3 Units****Advisory:** IDES 180 F.

54 hours lecture per term. This course provides an overview of the historical relationship between architecture, period furniture and the decorative arts. It begins with 16th century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to social, economic, and political forces. (CSU) (Degree Credit)

**IDES 200 F Interior Illustration I 2 Units****Advisory:** IDES 100 F and IDES 130 F

This course covers the application of the methods, techniques and tools used for illustrating interior spaces and furnishings. Included are one-point and two-point perspective rendering. (CSU) (Degree Credit)

**IDES 210 F Fundamentals of Lighting 3 Units**

54 hours lecture per term. This course covers the fundamentals of lighting, design, theory and application including the history and vocabulary of lighting; how light affects color and vision; lighting techniques for interior designers; code requirements, and energy efficient lighting practices. (Degree Credit) (CSU)

**IDES 215 F Interior Design Studio II 2 Units****Prerequisite(s):** IDES 100 F and IDES 105 F, with a grade of C or better**Advisory:** IDES 110 F, IDES 130 F, IDES 170 F and IDES 200 F.

18 hours lecture and 54 hours lab per term. This course allows the student to pursue individual interior design projects with supervision and the use of the Interior Design lab resources. Universal Design, Green Design, space planning, interior components, lighting systems, architectural elements and specification writing will be integrated into research projects emphasizing a problem-solving approach. (CSU) (Degree Credit)

**IDES 220 F Interior Design Building Codes 3 Units****Advisory:** IDES 100 F

54 hours lecture per term. This course explores California building codes, regulations, standards and specifications concerning life-safety issues, Title 24, universal design and Green requirements relative to residential and commercial interior design. Special attention is given to construction type, occupancy, exit path of travel, safety, testing and compliance for interior materials and products. (CSU) (Degree Credit)

**IDES 225 F Interior Illustration II 2 Units****Advisory:** IDES 200 F

18 hours lecture and 54 hours lab per term. This course expands on the techniques learned in IDES 200 F for rendering interior spaces and furnishings by incorporating a variety of computer-aided design programs in creating 3D drawings. (CSU) (Degree Credit)

**IDES 230 F Business and Professional Practice 3 Units**

54 hours lecture per term. This course covers the business and professional management of an interior design practice including legal requirements, project management and business practices. (CSU) (Degree Credit)

**IDES 240 F Interior Design Internship 2-4 Units**

18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course allows students to earn credit through supervised employment in an interior design establishment. This course meets weekly with the instructor. This course should be taken when students are nearing completion of the Interior Design certificate or degree. (CSU) (Degree Credit)

**IDES 248AF Restaurant and Hotel Design 2 Units****Prerequisite(s):** with a grade of C or better

18 hours lecture and 54 hours lab per term. This course covers the principles of space planning applied to the unique problems of the hospitality industry including design, systems and specifications. (CSU) (Degree Credit)

**IDES 249BF Study of International Architecture and Design 2 Units**

36 hours lecture per term. This course includes pre-trip lectures and guided trips during travel tour. The course content will vary according to area studied, but will include emphasis of architecture and interior design of specific European countries or areas on the American continent. (CSU) (Degree Credit)

**IDES 249CF Study of International Architecture and Design 3 Units**

54 hours lecture per term. This course includes pre-trip lectures and guided trips during travel tour. The course content will vary according to area studied, but will include emphasis on architecture and interior design of specific European countries or areas on the American continent. (CSU) (Degree Credit)

**IDES 260 F Interior Illustration III 2 Units****Advisory:** IDES 200 F.

18 hours lecture and 54 hours lab per term. In this course, the student refines the skills learned in IDES 225 F, for communicating design concepts in 3D. Techniques in rapid visualization are explored and combined with digital rendering for enhancement of portfolio presentations. (CSU) (Degree Credit)

**IDES 265 F Interior Design Studio III 2 Units****Prerequisite(s):** IDES 170 F and IDES 215 F, with a grade of C or better.**Advisory:** IDES 130 F, IDES 150 F, IDES 190 F, IDES 200 F and IDES 210 F.

18 hours lecture and 54 hours lab per term. This course explores design solutions for total interior space planning of commercial environments. This is achieved through programming, development of working drawings, codes application, lighting and electrical analysis, and the research of materials, fixtures, furniture, and equipment. (CSU) (Degree Credit)

**IDES 275 F Interior Design Studio IV 2 Units****Prerequisite(s):** IDES 265 F with a grade of C or better.

18 hours lecture and 54 hours lab per term. This course focuses on the application of the interior design process for complete custom residential spaces. A comprehensive design approach will be utilized that includes programming, lighting and electrical plans, selection of surfaces, materials, fixtures, furnishings, equipment, and custom cabinetry. (CSU) (Degree Credit)

## Commercial Interior Design Certificate

### Requirements

**PROGRAM CODE:** 2C10626A

The **Commercial Interior Design Certificate (formerly Commercial Design Certificate)** is designed to prepare the student for an entry level position within a commercial interior design establishment. Skills will be attained in designing a complete commercial interior, including space planning; lighting; and selection of fixtures, furnishings, equipment and surfaces. In addition, the student will qualify to take the IDEX (Interior Design Examination) administered by the California Council for Interior Design Certification (CCIDC) leading to the professional designation of Certified Interior Designer (CID) in the State of California. This certificate option requires completion of the Interior Design Assistant Certificate (28 units) plus the Commercial Interior Design Certificate (17-19 units) plus restrictive

elective (5-7 units) for a total of 50-54 units of required courses. A grade of C or better is required for all courses.

Code	Title	Units
<b>Required Core Courses - Select from the Interior Design Assistant Certificate (28 units):</b>		
ARCH 124 F	Architectural CAD I	3
ARCH 924 F	Architectural CAD II	3
IDES 100 F	Fundamentals of Interior Design	3
IDES 105 F	Interior Design Studio I	2
IDES 110 F	Drafting for Interior Design (formerly Drafting - Interior Design)	3
IDES 130 F	Applied Color and Design Theory	4
IDES 150 F	Interior Materials and Products	4
IDES 180 F	History of Architecture and Furnishings I (formerly History of Architecture I)	3
IDES 190 F	History of Architecture and Furnishings II (formerly History of Interior Architecture II)	3
<b>Required Courses for Commercial Design Certificate (17-19 units):</b>		
IDES 175 F	Space Planning II	3
IDES 200 F	Interior Illustration I	2
IDES 210 F	Fundamentals of Lighting	3
IDES 215 F	Interior Design Studio II	2
IDES 225 F	Interior Illustration II	2
IDES 230 F	Business and Professional Practice	3
IDES 240 F	Interior Design Internship	2-4
<b>Restricted Electives (5-7 units):</b>		
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
IDES 220 F	Interior Design Building Codes	3
IDES 260 F	Interior Illustration III	2
IDES 265 F	Interior Design Studio III	2
MKT 208 F	Principles of Selling	3
<b>Total Units</b>		<b>50-54</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and understand the sequential Interior Design Process from discovery to post evaluation of an interior design project.

**Outcome 2:** Produce and demonstrate comprehensive solutions to advanced interior design projects.

## Interior Design Assistant Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C10625A

The **Interior Design Assistant Certificate** provides the student with broad knowledge of the interior design profession and careers therein. Entry level skills will be acquired to serve as an assistant to a commercial or residential interior designer, or merchandising in a retail setting. This certificate lays the foundation for acquiring the Associate of Science Interior Design Degree or the Commercial Interior Design Certificate and/or Residential

Design Certificate. This certificate requires the completion of 28 units. A grade of C or better is required for each course.

Code	Title	Units
<b>Required Courses (28 units):</b>		
ARCH 124 F	Architectural CAD I	3
ARCH 924 F	Architectural CAD II	3
IDES 100 F	Fundamentals of Interior Design	3
IDES 105 F	Interior Design Studio I	2
IDES 110 F	Drafting for Interior Design (formerly Drafting - Interior Design)	3
IDES 130 F	Applied Color and Design Theory	4
IDES 150 F	Interior Materials and Products	4
IDES 180 F	History of Architecture and Furnishings I (formerly History of Architecture I)	3
IDES 190 F	History of Architecture and Furnishings II (formerly History of Interior Architecture II)	3
<b>Total Units</b>		<b>28</b>

## Program Student Learning Outcomes

**Outcome 1:** Analyze and produce solutions for the design of an interior environment.

**Outcome 2:** Evaluate and produce a criteria program as a basis for a design project.

## Interior Design Associate in Science Degree

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2S03860A

The **Interior Design Associate in Science Degree** is designed to prepare the student for entry level work in the field of residential or commercial interior design. Career avenues include, but are not limited to, Space Planning, Lighting Specialties, Retail Showroom, Merchandising, Illustration, Remodeling, Materials and Products Specialist, Project Coordinator, and Kitchen & Bath Design. This degree requires a total of 53-57 units.

Code	Title	Units
<b>Required Courses (48-50 units):</b>		
ARCH 124 F	Architectural CAD I	3
ARCH 924 F	Architectural CAD II	3
IDES 100 F	Fundamentals of Interior Design	3
IDES 105 F	Interior Design Studio I	2
IDES 110 F	Drafting for Interior Design (formerly Drafting - Interior Design)	3
IDES 130 F	Applied Color and Design Theory	4
IDES 150 F	Interior Materials and Products	4
IDES 170 F	Space Planning I	3
IDES 175 F	Space Planning II	3
IDES 180 F	History of Architecture and Furnishings I (formerly History of Architecture I)	3

IDES 190 F	History of Architecture and Furnishings II (formerly History of Interior Architecture II)	3
IDES 200 F	Interior Illustration I	2
IDES 210 F	Fundamentals of Lighting	3
IDES 215 F	Interior Design Studio II	2
IDES 225 F	Interior Illustration II	2
IDES 230 F	Business and Professional Practice	3
IDES 240 F	Interior Design Internship	2-4
<b>Restricted Electives (5-7 units):</b>		<b>5-7</b>
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
IDES 220 F	Interior Design Building Codes	3
IDES 260 F	Interior Illustration III	2
IDES 265 F	Interior Design Studio III	2
IDES 275 F	Interior Design Studio IV	2
MKT 208 F	Principles of Selling	3
<b>Total Units</b>		<b>53-57</b>

## Program Student Learning Outcomes

**Outcome 1:** Preparation for the IDEX (Interior Design Examination) administered by the California Council for Interior Design Certification (CCIDC) leading to the professional designation of Certified Interior Designer (CID) in the State of California.

**Outcome 2:** Prepare for employment as an interior design assistant.

## Residential Interior Design Certificate

### Requirements

PROGRAM CODE: 2C13209A

The **Residential Interior Design Certificate (formerly Residential Design Certificate)** is designed to prepare the student for an entry level position within a residential interior design establishment. In addition, the student will qualify to take the IDEX (Interior Design Examination) administered by the California Council for Interior Design Certification (CCIDC) leading to the professional designation of Certified Interior Designer in the State of California. This certificate option requires the completion of the Interior Design Assistant Certificate and additionally provides advanced courses in interior design. This certificate requires a total of 50-54 units. A grade of C or better is required for all courses.

Code	Title	Units
<b>Required Core Courses from the Interior Design Assistant Certificate (28 units):</b>		
ARCH 124 F	Architectural CAD I	3
ARCH 924 F	Architectural CAD II	3
IDES 100 F	Fundamentals of Interior Design	3
IDES 105 F	Interior Design Studio I	2
IDES 110 F	Drafting for Interior Design (formerly Drafting - Interior Design)	3
IDES 130 F	Applied Color and Design Theory	4
IDES 150 F	Interior Materials and Products	4
IDES 180 F	History of Architecture and Furnishings I (formerly History of Architecture I)	3

IDES 190 F	History of Architecture and Furnishings II (formerly History of Interior Architecture II)	3
<b>Required Courses for Residential Interior Design Certificate (17-19 units):</b>		
IDES 170 F	Space Planning I	3
IDES 200 F	Interior Illustration I	2
IDES 210 F	Fundamentals of Lighting	3
IDES 215 F	Interior Design Studio II	2
IDES 225 F	Interior Illustration II	2
IDES 230 F	Business and Professional Practice	3
IDES 240 F	Interior Design Internship	2-4
<b>Restricted Electives (5-7 units):</b>		<b>5-7</b>
CSTR 030 F	Construction Plans Reading (formerly Construction Blueprint Reading)	3
IDES 220 F	Interior Design Building Codes	3
IDES 260 F	Interior Illustration III	2
IDES 275 F	Interior Design Studio IV	2
MKT 208 F	Principles of Selling	3
<b>Total Units</b>		<b>50-54</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and understand the sequential Interior Design Process from discovery to post evaluation of a residential interior design project.

**Outcome 2:** Produce and demonstrate comprehensive solutions to advanced residential interior design projects.

## Journalism

Division: Technology and Engineering

### Faculty

Jessica Langlois  
Jay Seidel

### Degrees and Certificates

- Drone Journalism Certificate (p. 382)
- Journalism Associate in Arts Degree (p. 382)
- Journalism Associate in Arts Degree for Transfer (p. 382)
- Journalism Certificate (p. 383)
- Public Relations Certificate (p. 383)
- Spanish Language Media Certificate (p. 384)

### Courses

**JOUR 101 F Reporting and Writing** **3 Units**  
**Prerequisite(s):** ENGL 100 F or ENGL 100HF with a grade of C or better  
54 hours lecture per term. This course provides an introduction to the skills and practices of news reporting as applied to the various types of media outlets. Focus is placed on various story types - news, feature, editorial, online, column sports, and press release. (CSU) (UC) (Degree Credit) AA GE (C-ID: JOUR 110)

- JOUR 102 F Advanced Reporting and Writing** **3 Units**  
*Prerequisite(s):* JOUR 101 F with a grade of C or better  
 54 hours lecture per term. This course covers the study and practice of advanced reporting and newsgathering techniques are the main focus stressing interviewing and research skills, investigative, special assignment and online reporting. (Degree Credit) (CSU) (C-ID: JOUR 210)
- JOUR 108 F Feature Writing** **3 Units**  
*Prerequisite(s):* ENGL 060 F or ENGL 099 F, with a grade of Pass or ESL 186 F or ESL 190 F with a grade of C or Pass, or recommended score on the English placement test.  
 54 hours lecture per term. This course covers the principles of feature writing for magazines, newspapers, and other print and online media. The instruction stresses the process of organizing the writing of non-fiction articles from idea to finished product. Students will receive instruction on techniques of query writing, developing and writing a publishable feature article. Copyright and libel laws will be included; both professional and peer evaluations will be utilized. (CSU) (Degree Credit)
- JOUR 110 F Mass Media Survey** **3 Units**  
 54 hours lecture per term. This course provides an introduction to the mass communications media and a critical consideration of their roles in our society. Mass media under consideration in this course will include: books, newspapers, magazines, movies, radio, television, film and the Internet. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: JOUR 100)
- JOUR 110HF Honors Mass Media Survey** **3 Units**  
 54 hours lecture per term. This Honors-enhanced course provides an introduction to the mass media and a critical consideration of their roles in our society enhanced for Honors students designed to develop critical thinking, and writing strategies, including research and documentation skills necessary for academic success. The areas examined include books, newspapers, magazines, movies, radio, television, film and the Internet. This course will be conducted as a seminar and it will require a significant independent research project that uses correct documentation skills. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: JOUR 100)
- JOUR 132 F Introduction to Magazine Production** **3 Units**  
 54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for the online publication - fctorch.net. (Degree Credit) (CSU) (C-ID: JOUR 130)
- JOUR 133 F Beginning Magazine Production** **3 Units**  
*Prerequisite(s):* JOUR 132 F with a grade of C or better  
 54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Greater emphasis is placed on writing longer, in-depth magazine articles, editing techniques, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for the online publication. (Degree Credit) (CSU) (C-ID: JOUR 131)
- JOUR 134 F Intermediate Magazine Production** **3 Units**  
*Prerequisite(s):* JOUR 133 F with a grade of C or better  
 54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine and online publications is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs, multimedia storytelling and packaging all elements together. (CSU) (Degree Credit)
- JOUR 135 F Advanced Magazine Production** **3 Units**  
*Prerequisite(s):* JOUR 134 F with a grade of C or better  
 54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for online publication. (CSU) (Degree Credit)
- JOUR 140 F Public Relations and Publicity** **3 Units**  
 54 hours lecture per term. In this course, students will study and practice the techniques and responsibilities of corporate, agency, and non-profit public relations with special attention to publicity writing and public relations campaign development (CSU) (C-ID: JOUR 150)
- JOUR 150 F Social Media Communications** **3 Units**  
 54 hours lecture and 18 hours lab per term. This course focuses on the use of social media in journalism and public relations. Students will analyze the impact of social media; learn how to read statistics about social media usage; and create professional or academic social media accounts, using posts to cultivate an expertise in a subject matter of interest. (CSU) (Degree Credit)
- JOUR 196 F Specialized Reporting (formerly Communications Seminar)** **3 Units**  
 54 hours lecture per term. This course is designed to expose students to specialized reporting skills in the field of journalism. This course offers the student opportunity for specialized training in greater depth than can be offered in a general course. Topics will vary from semester to semester depending on new developments in industry, and need for specialized training. See class schedule for current seminar offerings. Students may enroll in up to a maximum of four semesters. (CSU) (Degree Credit)
- JOUR 199 F Journalism Independent Study** **1-3 Units**  
*Prerequisite(s):* JOUR 101 F with a grade of C or better  
 54-162 hours independent study per term. This course is designed for advanced students who wish to increase their knowledge of journalism and public relations through individual study. Independent laboratory research problems with staff supervision may be approved. Project with written report or outside reading with written report is required. (CSU) (UC Credit Limitation depending upon course content; UC review required) (Degree Credit)
- JOUR 210 F Multimedia Reporting** **3 Units**  
 54 hours lecture and 18 hours lab per term. This course focuses on media article writing and digital storytelling. Students will develop multimedia news reporting and writing techniques with an emphasis on the Web. Students research, write, and edit articles as they practice the skills of gathering information from a variety of sources. Students synthesize, edit and prepare stories for dissemination online. Students will learn the basics of visual journalism storytelling, including basic elements of shooting video, recording audio, editing video and audio, and creating news websites. A culminating project will demonstrate knowledge of reporting and writing for print and broadcast on the web. (Degree Credit) (CSU) (C-ID: JOUR 120)
- JOUR 215 F UAV and Drone Reporting** **3 Units**  
*Advisory:* : JOUR 101 F.  
 36 hours lecture and 54 hours lab per term. This course is designed to give students the ability to learn about UAVs (drones) and how to use them in reporting. Special emphasis is placed on equipment selection, aerial photography and video storytelling, editing and safety and ethical considerations. (CSU) (Degree Credit)

- JOUR 219 F Photojournalism** 3 Units  
36 hours lecture and 54 hours lab per term. This course covers the basics of digital photography for publication both print and online such as news, advertising, feature, sports, lifestyle, photo essay, and documentary applications. Students will work with the student publications on campus. (Degree Credit) (CSU) (C-ID: JOUR 160)
- JOUR 220 F Introduction to Investigative Reporting** 3 Units  
*Prerequisite(s)*: JOUR 101 F with a grade of C or better.  
54 hours lecture and 18 hours lab per term. This course is an introduction to watchdog reporting in local communities. Students will learn skills and techniques in investigative journalism, research methods and computer-assisted reporting, including data analysis. Students will participate in the production of college and community news websites. (CSU) (Degree Credit)
- JOUR 221 F Introduction to Visualizing Data** 3 Units  
54 hours lecture and 18 hours lab per term. This course focuses on finding and telling visual stories from large quantities of data. Students will find, obtain and analyze data. They will create accurate, telling visualizations - such as maps, charts, diagrams and graphs - to show statistical information; critically evaluate visual communication for accuracy, thoroughness and effectiveness; and study and practice techniques through the production of graphics for college and community publications. (CSU) (Degree Credit)
- JOUR 222 F Introduction to News Media Production** 3 Units  
36 hours lecture and 54 hours lab per term. This course is an introduction to news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (Degree Credit) (CSU) (C-ID: JOUR 130)
- JOUR 223 F Beginning News Media Production** 3 Units  
*Prerequisite(s)*: JOUR 222 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course expands news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (CSU) (C-ID: JOUR 131)
- JOUR 224 F Intermediate News Media Production** 3 Units  
*Prerequisite(s)*: JOUR 223 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course is expanded training in news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit).
- JOUR 225 F Advanced News Media Production** 3 Units  
*Prerequisite(s)*: JOUR 224 F with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course includes the following areas of study: reporting, editing, design, photojournalism, multimedia reporting and publishing techniques are also studied and practiced in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit).
- JOUR 230 F Virtual Reality Storytelling (formerly Virtual Reality/360 Storytelling)** 3 Units  
54 hours lecture per term. In this course, students will learn how to shoot and edit 360-degree video as they create non-fiction immersive content. The understanding of the VR mix, ranging from content creation to content consumption will be addressed. (Degree Credit) (CSU)
- JOUR 271 F Introduction to Spanish-Language Reporting** 3 Units  
*Advisory*: Understanding of conversational Spanish.  
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (C-ID: JOUR 130)
- JOUR 272 F Beginning Spanish-Language Reporting** 3 Units  
*Prerequisite(s)*: JOUR 271 F with a grade of C or better  
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. (Degree Credit) (CSU) (C-ID: JOUR 131)
- JOUR 273 F Intermediate Spanish-Language Reporting** 3 Units  
*Prerequisite(s)*: JOUR 272 F with a grade of C or better  
54 hours lecture and 18 hours lab per term. This course will continue to allow students to develop the methods and styles of reporting and writing in Spanish in multimedia format. It will prepare students to edit and publish multiple stories and photos on the campus' Spanish-language publication. (CSU) (Degree Credit)
- JOUR 274 F Advanced Spanish-Language Reporting** 3 Units  
*Prerequisite(s)*: JOUR 273 F with a grade of C or better  
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. (CSU) (Degree Credit)
- JOUR 290 F Internship in Journalism and Public Relations** 2-4 Units  
18 hours lecture and 90-270 hours lab per term. This course offers career development opportunities for students and industry professional who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through employment/internships at newspapers, magazines, public relations firms, companies requiring journalism and public relations experts, radio, television, and cable stations. (CSU) (Degree Credit)
- JOUR 291 F Internship in Journalism and Public Relations II** 2-4 Units  
*Prerequisite(s)*: JOUR 290 F with a grade of C or better  
18 hours lecture and 90-270 hours lab per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)
- JOUR 292 F Internship in Journalism and Public Relations III** 2-4 Units  
*Prerequisite(s)*: JOUR 291 F with a grade of C or better  
18 hours lecture and 90-270 hours of employment or unpaid internship per term. This course is designed to give the student the skills needed to market themselves as professionals in the entertainment and communication industries. (CSU) (Degree Credit).

**JOUR 293 F Internship in Journalism and Public Relations IV 2-4 Units****Prerequisite(s):** JOUR 292 F with a grade of C or better

18 hours lecture and 90-270 hours of employment or unpaid internships per term. This course is designed to help the students who are interning to transition into working as independent contractors in the communication and entertainment related industries. (CSU) (Degree Credit)

## Drone Journalism Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C41269

The **Drone Journalism Certificate** is designed to provide a sound base for students interested in drone journalism, and could lead to employment in a communications field that needs experience with drone photography and reporting. A grade of C or better is required in each course taken. This certificate requires a total of 18-20 units.

Code	Title	Units
<b>Required Courses (16 units):</b>		
TECH 080 F	Federal Aviation Administration Drone Pilot Test Preparation	1
JOUR 101 F	Reporting and Writing	3
JOUR 210 F	Multimedia Reporting	3
JOUR 215 F	UAV and Drone Reporting	3
PHOT 111 F	Introduction to Photography from Analog to Digital	3
ESC 105 F	Introduction to Weather and Climate	3
<b>Restricted Electives (2-4 units):</b>		<b>2-4</b>
CRTV 157 F	Digital Production and Non-Linear Editing for Video and Film	3
GEOG 102 F	Physical Geography	3
or GEOG 102HF	Honors Physical Geography	
GEOG 102LF	Physical Geography Laboratory	1
JOUR 102 F	Advanced Reporting and Writing	3
JOUR 222 F	Introduction to News Media Production	3
PHOT 216 F	Advanced Digital Photography	3
PHOT 217 F	Applied Digital Photography	3
PHYS 130 F	Elementary Physics	4
TECH 155 F	Applied Drone Lab	2
<b>Total Units</b>		<b>18-20</b>

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate ability to pilot and land a drone aircraft safely.

**Outcome 2:** Compose a series of publishable photographs from a drone.

**Outcome 3:** Explain the legal use of drones in today's society.

## Journalism Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03829

The **Journalism Associate in Arts Degree** Program provides a sound base for students interested in journalism, and could lead to employment at a media outlet. This degree requires a total of 18 units all of which are in required courses listed below.

Code	Title	Units
<b>Required Courses (18 units):</b>		
CRTV 129 F	Broadcast News	3
or JOUR 210 F	Multimedia Reporting	
JOUR 101 F	Reporting and Writing	3
JOUR 102 F	Advanced Reporting and Writing	3
JOUR 110 F	Mass Media Survey	3
JOUR 222 F	Introduction to News Media Production	3
or JOUR 132 F	Introduction to Magazine Production	
PHOT 111 F	Introduction to Photography from Analog to Digital	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Assess the news value of an article.

**Outcome 2:** Construct a factual, well-sourced article for publication.

**Outcome 3:** Create a multimedia story suitable for publication.

**Outcome 4:** Evaluate a written or broadcast story and identify libel or slander.

## Journalism Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A36790

The **Associate in Arts in Journalism for Transfer**, also called the Journalism AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Journalism or Communications. Ed Code Section 66746-66749 states that students earning the Journalism AA-T Degree will be granted priority for admission as a Journalism or Communications major to a local CSU, as determined by the CSU campus to which the student applies. Journalism relates to print, broadcast, visual and multimedia reporting as well as public relations. This degree is designed for students who want to develop skills in communication and reporting for today's media or working in the public relations field. The Journalism AA-T Degree requires a total of 18-20 units of required courses and restricted electives as listed below.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).

- b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core (9 units):</b>		
JOUR 101 F	Reporting and Writing	3
JOUR 110 F	Mass Media Survey	3
or JOUR 110HF	Honors Mass Media Survey	
JOUR 222 F	Introduction to News Media Production	3
or JOUR 132 F	Introduction to Magazine Production	
or JOUR 271 F	Introduction to Spanish-Language Reporting	
<b>List A - Select 3 units:</b> 3		
JOUR 102 F	Advanced Reporting and Writing	3
JOUR 133 F	Beginning Magazine Production	3
or JOUR 223 F	Beginning News Media Production	
or JOUR 272 F	Beginning Spanish-Language Reporting	
JOUR 140 F	Public Relations and Publicity	3
JOUR 210 F	Multimedia Reporting	3
JOUR 219 F	Photojournalism	3
<b>List B - Select 6-8 units:</b> 6-8		
COMM 135 F	Essentials of Argumentation	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
or ECON 102 F	Principles of Economics - Macro	
or ECON 102HF	Honors Principles of Economics-Macro	
ENGL 103 F	Critical Reasoning and Writing	4
or ENGL 103HF	Honors Critical Reasoning and Writing	
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
or PSY 161 F	Elementary Statistics for Behavioral Science	
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
or SOSC 120 F	Introduction to Probability and Statistics	
PHIL 170 F	Logic and Critical Thinking	3
PHIL 172 F	Critical Thinking and Writing	3
PHOT 111 F	Introduction to Photography from Analog to Digital	3
POSC 100 F	American Government	3
or POSC 100HF	Honors American Government	
POSC 215 F	Comparative Politics	3
<b>Total Units</b>		<b>18-20</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify the seven elements that determine news value.

**Outcome 2:** Compose a summary news lead in an article for publication.

**Outcome 3:** Identify Associated Press style within a news story.

**Outcome 4:** Compose a well-researched article for publication.

## Journalism Certificate

### Requirements

PROGRAM CODE: 2C21264

The **Journalism Certificate Program** will provide students with sufficient background for reporting, writing and production jobs on community newspapers and weekly publications. The Certificate requires a total of 30 units of which 24 units are in required courses. An additional 6 units must be completed from the restricted electives listed below. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (24 units):</b>		
DART 140 F	Digital Publishing I	3
JOUR 102 F	Advanced Reporting and Writing	3
JOUR 110 F	Mass Media Survey	3
JOUR 132 F	Introduction to Magazine Production	3
JOUR 140 F	Public Relations and Publicity	3
JOUR 222 F	Introduction to News Media Production	3
CRTV 129 F	Broadcast News	3
or JOUR 210 F	Multimedia Reporting	
JOUR 101 F	Reporting and Writing	3
<b>Restricted Electives (6 units):</b> 6		
ART 145 F	Publication Design	3
DART 146 F	Digital Publishing II	3
JOUR 133 F	Beginning Magazine Production	3
JOUR 199 F	Journalism Independent Study	1-3
JOUR 219 F	Photojournalism	3
JOUR 223 F	Beginning News Media Production	3
JOUR 271 F	Introduction to Spanish-Language Reporting	3
PHOT 111 F	Introduction to Photography from Analog to Digital	3
<b>Total Units</b>		<b>30</b>

## Program Student Learning Outcomes

**Outcome 1:** Construct a well-researched factual news story suitable for publication.

**Outcome 2:** Evaluate and assess written articles for compliance to Associated Press style and proper grammar.

**Outcome 3:** Identify Associated Press style in writing 90 percent of the time.

**Outcome 4:** Identify libel or slander in a print or broadcast story.

## Public Relations Certificate

### Requirements

PROGRAM CODE: 2C08403A

The **Public Relations Certificate** will help students learn skills needed when working in the public relations field. The program requires the completion of 24 units, of which 18 units are required. An additional 6 units must

be selected from the restricted electives below. A grade of C or better is required for each course taken.

Code	Title	Units
<b>Required Courses (18 units):</b>		
JOUR 101 F	Reporting and Writing	3
JOUR 102 F	Advanced Reporting and Writing	3
JOUR 110 F	Mass Media Survey	3
JOUR 132 F	Introduction to Magazine Production	3
JOUR 140 F	Public Relations and Publicity	3
JOUR 222 F	Introduction to News Media Production	3
<b>Restricted Electives (6 units):</b>		
MKT 100 F	Introduction to Marketing	3
MKT 103 F	Principles of Advertising	3
MKT 201 F	Small Business Promotions	3
MKT 208 F	Principles of Selling	3
PHOT 111 F	Introduction to Photography from Analog to Digital	3
JOUR 210 F	Multimedia Reporting	3
JOUR 271 F	Introduction to Spanish-Language Reporting	3
<b>Total Units</b>		<b>24</b>

## Program Student Learning Outcomes

**Outcome 1:** Compose a newsworthy press release.

**Outcome 2:** Create a complete media kit.

**Outcome 3:** Identify Associated Press style in writing 90% of the time.

**Outcome 4:** Identify libel or slander in a print or broadcast story.

## Spanish Language Media Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C38646

The **Spanish Language Media Certificate** provides students with sufficient background for reporting, writing and production jobs on Spanish-language community newspapers and online publications. This certificate requires a total of 25-27 units of which 19-20 units are in required courses. An additional 6-7 units must be completed from the Restricted Electives listed below. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (19-20 units):</b>		
ETHS 101 F or ETHS 101HF	American Ethnic Studies Honors American Ethnic Studies	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
JOUR 101 F	Reporting and Writing	3
JOUR 110 F or JOUR 110HF	Mass Media Survey Honors Mass Media Survey	3
JOUR 271 F	Introduction to Spanish-Language Reporting	3

SPAN 201 F or SPAN 203 F	Spanish for the Spanish Speaker Intermediate Spanish III	4-5
<b>Restricted Electives (6-7 units):</b>		<b>6-7</b>
CRTV 129 F	Broadcast News	3
ETHS 151 F or ETHS 101HF	Chicana/o History I (formerly ETHS 141 F) Honors American Ethnic Studies	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 153 F or ETHS 153HF	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F) Honors Chicana-o and Latina-o Contemporary Issues	3
JOUR 210 F	Multimedia Reporting	3
JOUR 222 F	Introduction to News Media Production	3
JOUR 272 F	Beginning Spanish-Language Reporting	3
SPAN 204 F	Intermediate Spanish IV	4
SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3
<b>Total Units</b>		<b>25-27</b>

## Program Student Learning Outcomes

**Outcome 1:** Compose a newsworthy story for publication.

**Outcome 2:** Demonstrate an understanding of differences in content for print and broadcast media outlets.

## Latin American Studies

### Degrees/Certificates

- Latin-American Studies Associate in Arts Degree (p. 384)

## Latin-American Studies Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A08438

The **Latin-American Studies Associate in Arts Degree** is an interdisciplinary degree which combines courses from multiple academic disciplines to give students a broad background encompassing historical, political, social, cultural, and geographic aspects of Latin America. A degree in Latin American Studies affords students access to a wide range of career opportunities in the United States and abroad. The continuing importance of Latin America for the U.S. and the growing Latin population in the U.S. has produced an increasing need for trained persons with a knowledge of the region to work in government, teaching, business and other fields. The Latin-American Studies Associate in Arts Degree requires a total of 19-20 units.

Code	Title	Units
<b>Required Courses (13-14 units):</b>		
GEOG 100 F or GEOG 100HF	Global Geography Honors Global Geography	3
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3



HIST 191 F	History of the Americas II (formerly HIST 162BF)	3
SPAN 201 F	Spanish for the Spanish Speaker	4-5
or SPAN 203 F	Intermediate Spanish III	
or SPAN 204 F	Intermediate Spanish IV	
<b>Restricted Electives (6 units):</b>		<b>6</b>
ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF	Honors Cultural Anthropology	
BUS 131 F	Principles of International Business	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
ECON 102 F	Principles of Economics - Macro	3
or ECON 102HF	Honors Principles of Economics-Macro	
GEOG 160 F	Cultural Geography	3
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I)	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II)	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
POSC 215 F	Comparative Politics	3
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
SPAN 206 F	Introduction to Latin American Literature	3
<b>Total Units</b>		<b>19-20</b>

- Surfcam Skills Certificate (p. 390)
- Swiss Lathe Certificate (p. 391)

## Courses

### MACH 101 F Introduction to Machine Tools (formerly MACH 091 F)

**5 Units**

54 hours lecture and 108 hours lab per term. This is an introductory course designed to teach the fundamental skills used in the set up and operation of the engine lathes, milling machines, and surface grinders. Safety, shop mathematics, basic blueprint reading, cutting tool use and theory, selection of cutting speeds and feeds, and measurement techniques will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

### MACH 102 F Intermediate Machine Tools (formerly MACH 092 F)

**5 Units**

**Prerequisite(s):** MACH 101 F with a grade of C or better.

54 hours lecture and 108 hours lab per term. This intermediate level course is designed to advance the basic set up and operational skills developed in an introductory level machine tools course. Work will be performed on engine lathe, vertical milling machines, surface grinder, and sawing equipment. Students will also advance their skills in the use of various measuring tools, blueprint reading, shop mathematics and general machining techniques. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

### MACH 103 F Advanced Machine Tools (formerly MACH 093 F)

**5 Units**

**Prerequisite(s):** MACH 102 F with a grade of C or better.

54 hours lecture and 108 hours lab per term. This advanced level course is designed to further the set up and operational skills developed in an intermediate level machine tools course. Work will be performed on engine lathes, vertical milling machines, surface grinders, and sawing equipment. Students will also advance their skills in the use of various measuring tools, blueprint reading, shop mathematics, and general machining techniques. Computer numerical control (CNC) machines will also be utilized to complete laboratory assignments. Student entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

### MACH 104 F Advanced Topics in Machine Technology

**5 Units**

**Prerequisite(s):** MACH 103 F with a grade of C or better.

54 hours lecture and 108 hours lab per term. This advanced level course is designed to further the skills developed in the advanced level machine tools course. Work will be performed on engine lathes, vertical milling machines, surface grinders, and sawing equipment. Students will also advance their skills in the maintenance and repair of equipment used in machine and manufacturing facilities. Various machine and hand tools will also be utilized to complete laboratory assignments. CNC machines will also be utilized to complete laboratory assignments. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

## Program Student Learning Outcomes

**Outcome 1:** Show proficiency in intermediate Spanish.

**Outcome 2:** Identify important events, themes, and concepts of Latin American history and society.

**Outcome 3:** Examine problems and issues relating to Latin America by consulting primary and secondary sources, and formulating a thesis.

## Machine Technology

Division: Technology and Engineering

### Faculty

George Bonnard  
Dan O'Brien

### Degrees and Certificates

- CNC Operator Certificate (p. 387)
- Computer Numerical Control (CNC) Certificate (p. 388)
- Electronic Imaging Certificate (p. 388)
- Machine Technology Level I Certificate (p. 389)
- Machine Technology Level II Certificate (p. 389)
- Mastercam Skills Certificate (p. 389)
- Metrology Certificate (p. 390)
- Metrology Mini Skills Certificate (p. 390)

**MACH 105 F Conversational Programming I****3 Units****Prerequisite(s):** MACH 101 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This is an introductory course designed to teach the fundamental skills related to the setup and operation of conversational program-equipped computer numerically-controlled machine tools. Safety, tool selection, machine and controller functions, calculation and input of offsets, are also included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (Degree Credit) (CSU)

**MACH 106 F Conversational Programming II****3 Units****Prerequisite(s):** MACH 105 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This course is designed to teach the advanced setup and operation of conversational program-equipped computer numerically-controlled machine tools. Safety, tool selection, machine and controller functions, calculation and input of offsets, are also included. Students entering this program may enter a variety of manufacturing related fields such as machining; quality control; engineering; fabrication; and production management. (Degree Credit) (CSU)

**MACH 110 F CNC Machine Set-Up and Operation (formerly MACH 086 F)****3 Units****Advisory:** MACH 101 F.

45 hours lecture and 27 hours lab per term. This is an introductory course designed to teach the fundamental skills related to the setup and operation of computer numerically-controlled machine tools. Safety, tool selection, machine and controller functions, calculation and input of offsets are also included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 115 F CNC Parts Programming (formerly MACH 087 F)****3 Units****Advisory:** MACH 110 F.

45 hours lecture and 27 hours lab per term. This course covers manual programming techniques, calculations, and program development for CNC mills, machining centers and lathes. Three axis controllers will be discussed. Students will test part programs on CNC machines during lab hours. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 116 F Machine Tools****2 Units**

18 hours lecture and 54 hours lab per term. This course is for students majoring in mechanical drawing, industrial arts, engineering, and for students who wish to familiarize themselves with the machine tools of industry. Fundamentals of the machinist trade are taught. Students are taught the use of lathes, grinders, milling machines and measuring instruments. Methods planning for efficient machining is emphasized. (CSU) (Degree Credit)

**MACH 120 F Advanced CNC Machining (formerly MACH 088 F)****3 Units****Prerequisite(s):** MACH 115 F with a grade of C or better

45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction and practice in the concepts and practices associated with the successful programming and set up of CNC mills and lathes. Students will build upon prior experience with CNC machines to complete finished parts on CNC mills and lathes having various control types. Students will run programs and practice set-up processes during lab time. Student entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 130 F Multiple Axis CNC Set and Operation (formerly MACH 090 F)****3 Units****Prerequisite(s):** MACH 120 F with a grade of C or better

45 hours lecture and 27 hours lab per term. This course provides the student with instruction associated with the successful programming and set up of CNC mills with four and five axis of control. Students will build upon prior experience with CNC machines to complete finished parts on CNC mills with four and five axis of control. Students will run programs and practice set-up processes during laboratory time. Students will test part programs on CNC machines during laboratory hours. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 140 F Basic CNC Swiss Style Lathe Set-Up and Operation****3 Units****Advisory:** MACH 110 F.

45 hours lecture and 27 hours lab per term. This introductory course is designed to teach the fundamental skills used in the set up and operation of a basic CNC Swiss Style Lathe (screw machine). Safety, cutting tool use and theory, selection of cutting speeds/feeds will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 142 F Advanced CNC Swiss Style Lathe Set-Up and Operation****3 Units****Prerequisite(s):** MACH 140 F with a grade of C or better.

45 hours lecture and 27 hours lab per term. This is an advanced course designed to teach the skills used in the set up and operation of the CNC Swiss Style Lathe (screw machine). Safety, cutting tool use and theory, selection of cutting speeds/feeds will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 145 F Basic CNC Swiss Style Lathe Programming and Applications****3 Units****Prerequisite(s):** MACH 142 F with a grade of C or better

45 hours lecture and 27 hours lab per term. This is a programming and applications course designed to teach the fundamentals used to program a basic CNC Swiss Style Lathe (screw machine). Safety, cutting tool use and theory, selection of cutting speeds/feeds will also be included. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 150 F CNC Programming Using Mastercam (formerly MACH 050 F) 3 Units**

45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using Mastercam software to prepare CNC machine programs for both mills and lathes. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 152 F Advanced CNC Programming Using Mastercam (formerly MACH 052 F) 3 Units**

**Prerequisite(s):** MACH 150 F with a grade of C or better

45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction in the concepts and practices associated with using Mastercam software to prepare CNC machine programs for both mills and lathes. Students will build upon prior experience with Mastercam to develop 3D wireframe models, surface models, derived models, and composite surface models. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and production management. (CSU) (Degree Credit)

**MACH 154 F CNC Programming Using Surfcam (formerly MACH 060 F) 3 Units**

45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using SURFCAM software to prepare CNC machine programs for both mills and lathes. Students will process programs that demonstrate the features and functions of the software. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. (CSU) (Degree Credit)

**MACH 156 F Advanced CNC Programming Using Surfcam (formerly MACH 062 F) 3 Units**

**Prerequisite(s):** MACH 154 F with a grade of C or better or industry experience using Surfcam in a 2D environment.

45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction in the concepts and practices associated with using Surfcam software to prepare CNC machine programs for both mills and lathes. Students will build upon prior experience using Surfcam to develop 3D wireframe models, surface models, derived models and composite surface models. Students will process programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication and production management. Computer lab fee required. (CSU) (Degree Credit)

**MACH 157 F Computer-Aided Manufacturing 3 Units**

**Advisory:** MACH 115 F or MACH 150 F or MACH 154 F or industry experience with 2-3 axis CAM systems and CNC machine setup.

45 hours lecture and 27 hours lab per term. This course explores new and advanced CAM programs. Students will program CNC machines with 4-5 axis capabilities. Students will develop programs that demonstrate the features and functions of the software. Students entering this program may enter a variety of manufacturing-related fields such as machining, quality control, engineering, fabrication, and product management. (CSU) (Degree Credit)

**MACH 180 F Introduction to Metrology 3 Units**

45 hours lecture and 27 hours lab per term. This course is an introduction to metrology and measurement as it applies to the technical trades of machining, welding, fabrication, construction and drafting. This course covers the origins of measurements and standards that are commonly in use throughout industry. This course also covers applications and uses of several types of measurement systems from traditional tools still commonly used in advanced computer-driven inspection devices. (CSU) (Degree Credit)

**MACH 182 F Introduction to CMM Inspection and Romer Arms 3 Units**  
**Advisory:** Ability to read and write in English.

**Corequisite:** MACH 180 F with a grade of C or better. 45 hours lecture and 27 hours lab per term. This course will introduce the student to Coordinate Measuring Machines and Romer Arm fundamentals which utilize inspection software such as PC-DMIS or equivalent. This course covers the basics of set-up and operation of CMM machines including alignments, geometric feature definitions and calibrations. (CSU) (Degree Credit)

**MACH 184 F Advanced CMM and Romer Arm Inspection 3 Units**

**Prerequisite(s):** MACH 182 F with a grade of C or better.

**Advisory:** Ability to read and write in English.

45 hours lecture and 27 hours lab per term. This course is an advanced course using CMMs and Romer Arms which utilize PC-DMIS inspection software or equivalent. This course covers model-based definition inspection, advanced alignment, auto features, advanced dimensioning, fixturing/workholding for CMMs and CMM programming. (CSU) (Degree Credit)

**MACH 185 F CMM and Romer Arm Applications 2 Units**

**Advisory:** Ability to read and write in English.

**Corequisite:** MACH 184 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course will cover common applications that are utilized with Coordinate Measuring Machines (CMM) and Romer Arms Fixturing and advanced methods of inspection will be reviewed. (CSU) (Degree Credit)

## CNC Operator Certificate

**Division:** Technology and Engineering

### Requirements

**PROGRAM CODE:** 2C40638

The **CNC Operator Certificate** is designed to prepare students for entry-level employment as CNC (Computer Numerical Control) machine tool operators and to enhance the skills of machinists who are currently employed in the trade. This type of certificate program can also lead to entry level careers as a machinist, toolmaker, CNC programmer, manufacturing engineer, process engineer, field service technician as well as a number of other manufacturing/service positions. This certificate requires a total of 14 units. At least one half of the units toward the certificate must be completed at Fullerton College. A grade of C or better is required for each course taken.

Code	Title	Units
<b>Required Courses (14 units):</b>		
MACH 101 F	Introduction to Machine Tools (formerly MACH 091 F)	5
MACH 110 F	CNC Machine Set-Up and Operation (formerly MACH 086 F)	3
MACH 115 F	CNC Parts Programming (formerly MACH 087 F)	3

MACH 120 F	Advanced CNC Machining (formerly MACH 088 F)	3
<b>Total Units</b>		<b>14</b>

## Student Program Learning Outcomes

**Outcome 1:** Identify different types of computer numerical machinery, their axis systems, control features, positioning systems, tooling and cutting tools.

**Outcome 2:** Solve mathematical calculations necessary to determine part feature locations of machined parts.

# Computer Numerical Control (CNC) Certificate

## Requirements

PROGRAM CODE: 2C08416

The **Computer Numerical Control (CNC) Certificate** is designed to prepare students for programming multi-axis CNC machines. This certificate program is designed for students wishing to further pursue a career in machining or manufacturing. This type of certificate program typically leads to entry to intermediate level careers as a machinist, toolmaker, CNC operator, CNC programmer, manufacturing engineer, process engineer, field service technician as well as a number of other manufacturing/service positions. This Certificate Program requires 33-36 units to be taken in required courses. An additional 10-14 units must be chosen from the restricted electives listed below. This certificate requires a total of 43-50 units. At least one half of the units toward the certificate must be completed at Fullerton college. A grade of C or better is required for each course taken.

Code	Title	Units
<b>Required Courses (33-36 units):</b>		
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 140 F	AutoCAD for Industry	3
DRAF 173 F	Geometric Dimensioning and Tolerancing	2
MACH 101 F	Introduction to Machine Tools (formerly MACH 091 F)	2-5
or MACH 116 F	Machine Tools	
MACH 110 F	CNC Machine Set-Up and Operation (formerly MACH 086 F)	3
MACH 115 F	CNC Parts Programming (formerly MACH 087 F)	3
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
MACH 152 F	Advanced CNC Programming Using Mastercam (formerly MACH 052 F)	3
or MACH 156 F	Advanced CNC Programming Using Surfcam (formerly MACH 062 F)	
MACH 154 F	CNC Programming Using Surfcam (formerly MACH 060 F)	3
METL 192 F	Fundamentals of Metallurgy	3
TECH 081 F	Technical Mathematics I	3
TECH 108 F	Manufacturing Processes	3
<b>Restricted Electives (10-14 units):</b>		<b>10-14</b>
MACH 102 F	Intermediate Machine Tools (formerly MACH 092 F)	5

MACH 120 F	Advanced CNC Machining (formerly MACH 088 F)	3
TECH 088 F	Technical Science	3
TECH 127 F	Industrial Safety	2
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
<b>Total Units</b>		<b>43-50</b>

## Program Student Learning Outcomes

**Outcome 1:** Prepare computer numerical control programs for CNC turning and milling machines.

**Outcome 2:** Select the appropriate measuring tools to evaluate machined parts to blueprint specifications.

# Electronic Imaging Certificate

## Requirements

PROGRAM CODE: 2C10618

The **Electronic Imaging Certificate** is designed to provide students with practical knowledge of the electronic imaging section of the printing industry. This certificate focuses on the knowledge and practical skills used in the growing electronic imaging and digital printing areas of the printing industry, including electronic prepress, digital press operation, variable data printing, and color management. This certificate requires a total of 24 units. A grade of C or better is required in each course.

Code	Title	Units
<b>Required Courses (12 units):</b>		
PRNT 075 F	Electronic Prepress I	6
PRNT 077 F	Advanced Electronic Prepress	6
<b>Restricted Electives (12 units):</b>		<b>12</b>
PRNT 101 F	Introduction to Printing	3
PRNT 133 F	Packaging Production	3
PRNT 140 F	Color Management	3
PRNT 142 F	Prepress for Print using Adobe Creative Suite	3
PRNT 145 F	Variable Data Imaging	3
PRNT 171 F	Offset Presswork	6
<b>Total Units</b>		<b>24</b>

## Program Student Learning Outcomes

**Outcome 1:** Create, edit and analyze electronic files for print output using application software.

**Outcome 2:** Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic imposition and color correction technique.

# Machine Technology Level I Certificate

Division: Technology and Engineering

## Requirements

PROGRAM CODE: 2C36522A

The **Machine Technology Level I Certificate** is designed for students wishing to pursue a career in machining or manufacturing. This type of certificate program typically leads to entry level careers as a machinist, toolmaker, CNC operator, CNC programmer, manufacturing engineer, process engineer, field service technician as well as a number of other manufacturing/service positions. This certificate requires a total of 18 units. At least one half of the units toward the certificate must be completed at Fullerton College. A grade of C or better is required for each course taken.

Code	Title	Units
<b>Required Courses (18 units):</b>		
MACH 101 F	Introduction to Machine Tools (formerly MACH 091 F)	5
MACH 102 F	Intermediate Machine Tools (formerly MACH 092 F)	5
MACH 103 F	Advanced Machine Tools (formerly MACH 093 F)	5
MACH 110 F	CNC Machine Set-Up and Operation (formerly MACH 086 F)	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Solve mathematical calculations necessary for machining processes.

**Outcome 2:** Determine appropriate measuring tools to evaluate machine parts to blueprint specifications.

# Machine Technology Level II Certificate

## Requirements

PROGRAM CODE: 2C10624

The **Machine Technology Level II Certificate** is designed for students wishing to pursue a career in more advanced machining or manufacturing areas. This type of certificate program typically leads to entry or intermediate level careers as a machinist, toolmaker, CNC operator, CNC programmer, manufacturing engineer, process engineer, field service technician as well as a number of other manufacturing/service positions. This certificate requires a total of 32-37 units. At least one half of the units toward the certificate must be completed at Fullerton College. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (22-25 units):</b>		
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 173 F	Geometric Dimensioning and Tolerancing	2

MACH 101 F or MACH 116 F	Introduction to Machine Tools (formerly MACH 091 F) Machine Tools	2-5
MACH 102 F	Intermediate Machine Tools (formerly MACH 092 F)	5
MACH 103 F	Advanced Machine Tools (formerly MACH 093 F)	5
MACH 110 F	CNC Machine Set-Up and Operation (formerly MACH 086 F)	3
TECH 081 F	Technical Mathematics I	3
<b>Restricted Electives (10-12 units):</b>		<b>10-12</b>
DRAF 171 F	Fundamentals of Drafting	2
MACH 116 F	Machine Tools	2
MACH 120 F	Advanced CNC Machining (formerly MACH 088 F)	3
METL 192 F	Fundamentals of Metallurgy	3
TECH 108 F	Manufacturing Processes	3
TECH 127 F	Industrial Safety	2
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3

**Total Units** **32-37**

## Program Student Learning Outcomes

**Outcome 1:** Interpret engineering drawings related to the machining process.

**Outcome 2:** Determine operational sequences, select appropriate machine tools, work-holding devices and cutting tools for material removal.

**Outcome 3:** Demonstrate basic set-up/operation of machinery such as engine lathes, milling machines, surface grinders and basic CNC equipment to produce machined parts that fit together in assemblies.

# Mastercam Skills Certificate

## Requirements

PROGRAM CODE: 2C00046

The Mastercam Skills Certificate Program is designed for students wishing to further pursue a career in machining or manufacturing with an emphasis in Mastercam programming. This type of Certificate Program typically leads to entry to intermediate level careers as a machinist, toolmaker, CNC operator, CNC programmer, manufacturing engineer, process engineer, field service technician as well as a number of other manufacturing/service positions. This certificate requires a total of 6 units. Both classes must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (6 units):</b>		
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
MACH 152 F	Advanced CNC Programming Using Mastercam (formerly MACH 052 F)	3
<b>Total Units</b>		<b>6</b>

## Program Student Learning Outcomes

**Outcome 1:** Organize and construct geometry of 3D model parts for machining operations.

**Outcome 2:** Prepare numerical control programs for CNC machine tools.

**Outcome 3:** Select tools for the removal of material and toolpaths for rough and finish machining operations.

## Metrology Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C37762

The **Metrology Certificate** covers various aspects of the manufacturing processes which has an emphasis on dimensional metrology, inspection reporting, mechanical part geometry and computer-assisted inspection. The goal of the Metrology Certificate Program is to prepare students for entry to intermediate level employment in the inspection, Quality Assurance and/or manufacturing field. Students entering this field typically find work in the manufacturing industry or with governmental agencies. The Metrology Certificate is also designed to enhance the skills of individuals already in the inspection, Quality Assurance and/or the manufacturing field that have a desire to learn more about measurement tools in the manufacturing trade. The Metrology Certificate Program requires the completion of 29 units with a grade of C or better in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (29 units):</b>		
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 173 F	Geometric Dimensioning and Tolerancing	2
DRAF 944 F	Solidworks	3
MACH 116 F	Machine Tools	2
MACH 180 F	Introduction to Metrology	3
MACH 182 F	Introduction to CMM Inspection and Romer Arms	3
MACH 184 F	Advanced CMM and Romer Arm Inspection	3
MACH 185 F	CMM and Romer Arm Applications	2
METL 192 F	Fundamentals of Metallurgy	3
TECH 081 F	Technical Mathematics I	3
TECH 108 F	Manufacturing Processes	3
<b>Total Units</b>		<b>29</b>

## Program Student Learning Outcomes

**Outcome 1:** Employ basic and automated measurement tools to perform inspections.

**Outcome 2:** Perform simple calculations for unit conversions and obtain final values from blueprints for inspection reports.

**Outcome 3:** Demonstrate an understanding of the ANSI Y14.5 standard and how it is applicable to inspection processes.

## Metrology Mini Skills Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C40521

The **Metrology Mini Skills Certificate** is designed to prepare students for entry-level employment in the inspection, Quality Assurance and/or manufacturing field. The courses in this program focus on dimensional metrology, inspection reporting, mechanical part geometry and computer-assisted inspection. This Certificate program is also designed to enhance the skills of individuals already in the inspection, Quality Assurance and/or manufacturing field that have a desire to learn more about metrology tools in the manufacturing trade. The student is required to complete a total of 13 units. At least one half of the units toward the certificate must be completed at Fullerton College. A minimum grade of C or better is required for each course taken.

Code	Title	Units
<b>Required Courses (13 units):</b>		
DRAF 173 F	Geometric Dimensioning and Tolerancing	2
MACH 180 F	Introduction to Metrology	3
MACH 182 F	Introduction to CMM Inspection and Romer Arms	3
MACH 184 F	Advanced CMM and Romer Arm Inspection	3
MACH 185 F	CMM and Romer Arm Applications	2
<b>Total Units</b>		<b>13</b>

## Program Level Student Learning Outcomes

**Outcome 1:** Employ basic measurement tools to perform inspections.

**Outcome 2:** Perform simple calculations for unit conversions and to obtain final values from blueprints for inspection reports.

## Surfcam Skills Certificate

### Requirements

PROGRAM CODE: 2C00047

This **Surfcam Skills Certificate** program is designed for students wishing to further pursue a career in machining or manufacturing with an emphasis in Surfcam programming. This type of certificate program typically leads to entry to intermediate level careers as a machinist, toolmaker, CNC operator, CNC programmer, manufacturing engineer, process engineer, field service technician as well as a number of other manufacturing/service positions. This certificate requires a total of 6 units. Both classes must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (6 units):</b>		
MACH 154 F	CNC Programming Using Surfcam (formerly MACH 060 F)	3
MACH 156 F	Advanced CNC Programming Using Surfcam (formerly MACH 062 F)	3
<b>Total Units</b>		<b>6</b>

## Program Student Learning Outcomes

**Outcome 1:** Organize and construct geometry of three dimensional parts for machining operations.

**Outcome 2:** Select tools for the removal of material and tool-paths for rough and finish machining operations.

**Outcome 3:** Prepare numerically-controlled programs for computer numerical machine tools.

## Swiss Lathe Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C37761

The **Swiss Lathe Certificate** is designed to prepare students for entry-level employment as Screw Machine Operator (Machinist; Computer Numerical Control Operator) and to enhance the skills of machinists who are currently employed in the trade where Automatic Swiss Style Lathes (screw machines) are used. An Automatic Swiss Lathe type machine (commonly known as a Screw machine) performs a variety of task with one or more multiple spindles. These machines are used to produce bulk quantities of custom parts from stock metal or other materials. The Swiss Lathe Certificate requires the student to complete a total of 19 units. A grade of C or better is required for each taken. At least one-half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (19 units):</b>		
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
MACH 101 F	Introduction to Machine Tools (formerly MACH 091 F)	5
MACH 110 F	CNC Machine Set-Up and Operation (formerly MACH 086 F)	3
MACH 140 F	Basic CNC Swiss Style Lathe Set-Up and Operation	3
MACH 142 F	Advanced CNC Swiss Style Lathe Set-Up and Operation	3
MACH 145 F	Basic CNC Swiss Style Lathe Programming and Applications	3
<b>Total Units</b>		<b>19</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate the ability to set fixture offsets, tool length offsets, geometry and wear offsets on Swiss Style Lathe (screw machine type) to manufacture parts to blueprint specifications.

**Outcome 2:** Prepare a simple CNC program from blueprints for a Swiss Style Lathe (screw machine type).

## Manufacturing Technology

Division: Technology and Engineering

### Faculty

Dan Carter

Dan O'Brien

## Degrees and Certificates

- Manufacturing Technology Associate in Science Degree (p. 391)

## Manufacturing Technology Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03842

The **Manufacturing Technology Associate in Science Degree** incorporates courses from a number of departments within the Technology and Engineering Division. This degree typically leads to intermediate to advanced level technical careers as a machinist, toolmaker, CNC operator, CNC programmer, manufacturing engineer, process engineer, maintenance technician, field service technician, fabrication technician, machine builder, welders, designers, design engineers, CAD/CAM engineer as well as a number of other manufacturing, engineering, and service positions. A student pursuing the Manufacturing Technology major must take the required courses in addition to a concentration in one or more of the major areas. The areas of concentration are drafting, machine technology, and welding. This degree requires a total of 30-34 units. At least one-half of the units towards the major must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (15 units):</b>		
DRAF 171 F	Fundamentals of Drafting	2
MACH 116 F	Machine Tools	2
METL 192 F	Fundamentals of Metallurgy	3
TECH 108 F	Manufacturing Processes	3
TECH 127 F	Industrial Safety	2
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3
<b>Restricted Electives - Select 15-19 units from one of the areas below (select all courses from the same area for a concentration in DRAF, MACH or WELD):</b>		<b>15-19</b>
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 140 F	AutoCAD for Industry	3
DRAF 141 F	Advanced CAD for Industry	3
DRAF 143 F	3D Applications Using AutoCAD	3
DRAF 173 F	Geometric Dimensioning and Tolerancing	2
DRAF 944 F	Solidworks	3
DRAF 945 F	Advanced Solidworks	3
<b>Select 15-19 units from the courses listed below for a Machine Technology concentration:</b>		
MACH 101 F	Introduction to Machine Tools (formerly MACH 091 F)	5
MACH 102 F	Intermediate Machine Tools (formerly MACH 092 F)	5
MACH 103 F	Advanced Machine Tools (formerly MACH 093 F)	5
MACH 104 F	Advanced Topics in Machine Technology	5
MACH 110 F	CNC Machine Set-Up and Operation (formerly MACH 086 F)	3

MACH 115 F	CNC Parts Programming (formerly MACH 087 F)	3
MACH 120 F	Advanced CNC Machining (formerly MACH 088 F)	3
MACH 130 F	Multiple Axis CNC Set and Operation (formerly MACH 090 F)	3
MACH 140 F	Basic CNC Swiss Style Lathe Set-Up and Operation	3
MACH 142 F	Advanced CNC Swiss Style Lathe Set-Up and Operation	3
MACH 145 F	Basic CNC Swiss Style Lathe Programming and Applications	3
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
MACH 152 F	Advanced CNC Programming Using Mastercam (formerly MACH 052 F)	3
MACH 154 F	CNC Programming Using Surfcam (formerly MACH 060 F)	3
MACH 156 F	Advanced CNC Programming Using Surfcam (formerly MACH 062 F)	3
MACH 180 F	Introduction to Metrology	3
MACH 182 F	Introduction to CMM Inspection and Romer Arms	3
MACH 184 F	Advanced CMM and Romer Arm Inspection	3
MACH 185 F	CMM and Romer Arm Applications	2
<b>Select 15-19 units from the courses listed below for a Welding concentration:</b>		
WELD 091AF	Industrial Welding Fundamentals	5
WELD 091BF	Semi-Automatic Welding Applications	5
WELD 091CF	Manual Arc Welding Fundamentals	5
WELD 091DF	Structural Welding Certification	5
WELD 096 F	Welding Inspection Technology	5
WELD 098 F	Welding Fabrication Technology	2
WELD 120 F	Gas Shielded Arc Welding	3
<b>Total Units</b>		<b>30-34</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate welding on 16-gage steel with inert gas welding equipment.

**Outcome 2:** Develop manufacturing procedure for metal sub-assemblies.

## Marketing Management

Division: Business and Computer Information Systems

### Faculty

Gary Graves  
Kathy Standen

### Degrees and Certificates

- Marketing Management Associate in Science Degree (p. 393)
- Marketing Management Certificate (p. 394)
- Marketing Management Skills Certificate (p. 394)

## Courses

### MKT 100 F Introduction to Marketing **3 Units**

54 hours lecture per term. This course is an introduction to marketing as an exchange involving all members of society. Focus will be on the evolution of the marketing system and the research of the demographic and behavioral dimensions of markets. Topics include market analysis, marketing planning and implementation, consumer behavior, marketing research, marketing mix strategies and internet marketing. The course incorporates current developments in marketing to acquaint students with the present-day challenges of marketing activities, including the social, cultural, economic, competitive, legal, ethical, and technological environments of marketing. This course lays the foundation for more advanced marketing courses and related subject areas. (CSU) (Degree Credit) AA GE

### MKT 103 F Principles of Advertising **3 Units**

54 hours lecture per term. This course covers the role of historical, economic and social aspects of advertising. The development of creative advertising copy, advertising budgets, analysis of successful advertising campaigns and the creation of advertisements for the three broad categories of media (broadcast, print and digital) are discussed. (CSU) (Degree Credit)

### MKT 151 F Digital Marketing (formerly New Media) **3 Units**

54 hours lecture per term. This course will provide a broad overview of digital marketing tools. Course topics include website design and evaluation, SEO, internet advertising, content management, social media, email marketing, mobile marketing and analytics tools. (Degree Credit) (CSU)

### MKT 152 F Internet Advertising **2 Units**

36 hours lecture per term. This course will introduce students to advertising and promotional strategies using the Internet. Topics to be covered include new technologies in online advertising, buying and selling ads, direct marketing and sales promotion on the Internet, targeting and Web measurement techniques, and important legal issues. Students will develop an Internet promotional plan portfolio. (CSU) (Degree Credit)

### MKT 153 F Customer Service on the Internet **2 Units**

27 hours lecture and 27 hours lab per term. This course introduces the principles of relationship marketing and serving customers on the Internet. Topics include determining customer expectations, measuring success, using the website, e-mail, and extranets to increase customer satisfaction, and creating a relationship-based website. Students will develop an internet customer service plan. (CSU) (Degree Credit)

### MKT 160 F Introduction to Digital Marketing **1 Unit**

18 hours lecture per term. This course provides an introduction to digital marketing. Topics to be discussed include the marketing mix, when to use digital marketing, a broad overview of the tools used by marketers, trends in digital marketing and budget considerations. (CSU) (Degree Credit)

### MKT 161 F Web Design for Digital Marketing **1 Unit**

18 hours lecture per term. This course provides an overview of the principles of web design and will cover items including page elements and landing pages. (CSU) (Degree Credit)

### MKT 162 F Search Engine Optimization **1 Unit**

18 hours lecture per term. This course provides an introduction to the key tools used for SEO (search engine optimization). Keyword selection, links and popularity metrics will be reviewed. (CSU) (Degree Credit)



**MKT 163 F Search Engine Marketing 1 Unit**

18 hours lecture per term. This course provides an introduction to the key tools used for search engine marketing. Understanding the digital marketing space, including paid search marketing, choosing target markets, writing ad copy, buying advertising space, and Google AdWords will be covered. (CSU) (Degree Credit)

**MKT 164 F Online Advertising 1 Unit**

18 hours lecture per term. This course provides an introduction to the key tools used for online advertising. Students will understand display network, ad targeting, banner ad design, and remarketing. (CSU) (Degree Credit)

**MKT 165 F Content Considerations for Digital Marketing 1 Unit**

18 hours lecture per term. This course provides an overview of creating and finding effective content for a digital presence. The concepts of personas and content remarketing will be covered. (CSU) (Degree Credit)

**MKT 166 F Social Media Marketing 1 Unit**

18 hours lecture per term. This course will overview the key social media platforms, discuss pros/cons of each, explain how to create a social media plan and measure the success of an implementation. (CSU) (Degree Credit)

**MKT 167 F Email Marketing 1 Unit**

18 hours lecture per term. This course will overview using email to complement a digital marketing strategy. Where to find email lists, appropriate content, measuring email success and customer relationship management (CRM) will all be discussed. (CSU) (Degree Credit)

**MKT 168 F Digital Analytic Tools 1 Unit**

18 hours lecture per term. This course will describe the key analytic tools used by digital marketers, with a focus on metrics and key performance indicators. Google Analytics will be overviewed and students will receive hands-on experience reading Google Analytic reports. (CSU) (Degree Credit)

**MKT 169 F Digital Marketing Capstone - Strategy and Execution 1 Unit**

18 hours lecture per term. This capstone course provides students with the preparation for and the opportunity to complete a capstone project related to digital marketing. Topics may include an explanation of the strategy and digital planning process, the creation of a digital media calendar and preparation of digital media elements. (Degree Credit) (CSU)

**MKT 201 F Small Business Promotions 3 Units**

54 hours lecture per term. This course focuses on the techniques used to promote a small business and develop effective marketing communication strategies. Emphasis is on creating an effective promotional plan and devising affordable ways to communicate with customers through local media, sales promotion, the internet, publicity, brochures, direct mail and other methods. (CSU) (Degree Credit)

**MKT 203 F Principles of Retail Management 3 Units**

54 hours lecture per term. This course examines the principles and practices used in the management of successful retail stores. Topics include site selection, layout, organization, merchandising, staffing, positioning, customer service, promotional techniques, and all aspects of the critical buying function. (CSU) (Degree Credit)

**MKT 205 F Understanding Multicultural Markets in U.S. 3 Units**

54 hours lecture per term. This course provides comprehensive coverage of the multicultural marketing environment in the U.S., taking into consideration the changing needs and growing influence of ethnic and racial groups. Exploring the differences and commonalities that exist among the groups, the course examines the roles of business and the U.S.' marketing system in providing goods and services to meet each group's needs. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit)

**MKT 208 F Principles of Selling 3 Units**

54 hours lecture per term. This course emphasizes the fundamentals of selling and the new practices needed to succeed in today's information economy. Topics include understanding buyer behavior, building trust, communication and negotiation skills, oral presentation skills and the strategic selling process. This course will also cover the impact of the World Wide Web, sales, strategies used to build global relationships, ethical and legal considerations in selling, and a survey of customer relationship management technology. (CSU) (Degree Credit)

## Marketing Management Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03825

The **Marketing Management Associate in Science Degree** is designed for students who intend to seek immediate employment in the field of marketing and/or business, and those presently employed in marketing but seeking advancement. Graduates of this program may be employed in a number of jobs and career areas such as Advertising and Promotions Manager, Marketing Manager, Agent and Business Manager of Artists, Performers, and Athletes, Market Research Analyst and Marketing Specialist. This degree requires 24-25 units.

Code	Title	Units
MKT 100 F	Introduction to Marketing	3
MKT 151 F	Digital Marketing (formerly New Media)	3
<b>Select from the following MARKETING SPECIALTY courses (9 units):</b>		<b>9</b>
MKT 103 F	Principles of Advertising	3
MKT 151 F	Digital Marketing (formerly New Media)	3
MKT 201 F	Small Business Promotions	3
MKT 203 F	Principles of Retail Management	3
MKT 205 F	Understanding Multicultural Markets in U.S.	3
MKT 208 F	Principles of Selling	3
BUS 112 F	Public Speaking for Business	4
BUS 224 F	International Marketing	3
<b>Select one COMMUNICATIONS course from the following (3-4 units):</b>		<b>3-4</b>
BUS 111 F	Business Communications	3
BUS 112 F	Public Speaking for Business	4
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Select one MANAGEMENT course from the following (3 units):</b>		<b>3</b>
BUS 100 F	Introduction to Business	3
BUS 131 F	Principles of International Business	3
BUS 180 F	Small Business Management	3
<b>Select one LAW course from the following (3 units):<sup>1</sup></b>		<b>3</b>
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	

BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>Total Units</b>		<b>24-25</b>

<sup>1</sup> See counselor for determination of correct course.

## Program Student Learning Outcomes

**Outcome 1:** Identify the various marketing functions (product development, pricing, promotion, and distribution) and how organizations utilize these to produce goods and services that satisfy the needs and wants of the consumer.

**Outcome 2:** Utilize a working vocabulary of business terminology.

## Marketing Management Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C37109

The **Marketing Management Certificate** is designed for students who intend to seek immediate employment in the field of marketing and/or business, and those presently employed in marketing but seeking advancement. Graduates of this program may be employed in a number of jobs and career areas such as Advertising and Promotions Manager, Marketing Manager, Agent and Business Manager of Artists, Performers, and Athletes, Market Research Analyst and Marketing Specialist. A grade of C or better is required in each course taken. This certificate requires 24-25 units.

Code	Title	Units
<b>Required Core MARKETING Courses (6 units):</b>		
MKT 100 F	Introduction to Marketing	3
MKT 151 F	Digital Marketing (formerly New Media)	3
<b>Select MARKETING SPECIALTY courses from the following (9 units):</b>		
MKT 103 F	Principles of Advertising	3
MKT 201 F	Small Business Promotions	3
MKT 205 F	Understanding Multicultural Markets in U.S.	3
MKT 203 F	Principles of Retail Management	3
MKT 208 F	Principles of Selling	3
BUS 224 F	International Marketing	3
MKT 161 F	Web Design for Digital Marketing	1
MKT 162 F	Search Engine Optimization	1
MKT 163 F	Search Engine Marketing	1
MKT 164 F	Online Advertising	1
MKT 165 F	Content Considerations for Digital Marketing	1
MKT 166 F	Social Media Marketing	1
MKT 167 F	Email Marketing	1
MKT 168 F	Digital Analytic Tools	1
MKT 169 F	Digital Marketing Capstone - Strategy and Execution	1
<b>Select one COMMUNICATIONS course (3-4 units):</b>		
BUS 111 F	Business Communications	3
BUS 112 F	Public Speaking for Business	4

BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Select one MANAGEMENT course (3 units):</b>		<b>3</b>
BUS 100 F	Introduction to Business	3
BUS 180 F	Small Business Management	3
BUS 131 F	Principles of International Business	3
<b>Select one LAW course (3 units):<sup>1</sup></b>		<b>3</b>
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>Total Units</b>		<b>24-25</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify the various functions (product development, pricing, promotion, and distribution) and how organizations utilize these to produce goods and services that satisfy the needs and wants of the consumer.

**Outcome 2:** Utilize a working vocabulary of business technology.

## Marketing Management Skills Certificate

Division: Business and Computer Information Systems

### Requirements

PROGRAM CODE: 2C40974

The **Marketing Management Skills Certificate** is designed for students who intend to seek immediate employment in the field of marketing and/or business, and those presently employed in marketing but seeking advancement. Graduates of this program may be employed in a number of jobs and career areas such as Advertising and Promotions Manager, Marketing Manager, Agent and Business Manager of Artists, Performers, and Athletes, Market Research Analyst and Marketing Specialist. A minimum grade of C is required in each course taken. This certificate requires 15 units.

Code	Title	Units
<b>Required Core Marketing Courses (6 units):</b>		
MKT 100 F	Introduction to Marketing	3
MKT 151 F	Digital Marketing (formerly New Media)	3
<b>Required Marketing Speciality Courses (9 units):</b>		
MKT 103 F	Principles of Advertising	3
MKT 201 F	Small Business Promotions	3
MKT 203 F	Principles of Retail Management	3
MKT 205 F	Understanding Multicultural Markets in U.S.	3
MKT 208 F	Principles of Selling	3
MKT 161 F	Web Design for Digital Marketing	1
MKT 162 F	Search Engine Optimization	1
MKT 163 F	Search Engine Marketing	1
MKT 164 F	Online Advertising	1
MKT 165 F	Content Considerations for Digital Marketing	1

MKT 166 F	Social Media Marketing	1
MKT 167 F	Email Marketing	1
MKT 168 F	Digital Analytic Tools	1
MKT 169 F	Digital Marketing Capstone - Strategy and Execution	1
<b>Total Units</b>		<b>15</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify the various marketing functions (product development, pricing, promotion, and distribution) and how organizations utilize these to produce goods and services that satisfy the needs and wants of the consumer.

**Outcome 2:** Utilize a working vocabulary of business terminology.

## Mathematics

Division: Mathematics and Computer Science

### Faculty

Minh Bui  
Leonard Cho  
Mareike Claassen  
Dana Clahane  
Tim Cobler  
William Cowieson  
Robert Diaz  
Paul Farnham  
Nicolas Huerta  
Nancy Ikeda  
Marianna Jagodina  
Kelly Klassen  
Chris Larsen  
Laura Loney  
Scott Malloy  
Debbie McQueen  
Greg Nguyen  
Caleb Petrie  
Kara Pham  
Stephen Plett  
Rene Price  
Abraham Romero Hernandez  
Nicole Rossi  
Kenny Shah  
Paul Sjoberg  
Tanomo Taguchi-Trieu  
Dao Vo  
Juan Zaragoza  
Cindy Zarake

### Degrees and Certificates

- Mathematics Associate in Science Degree (p. 400)
- Mathematics Associate in Science Degree for Transfer (p. 401)

## Courses

**MATH N01 F Supervised Tutoring: Math** **0 Units**  
**NON-CREDIT COURSE:** This course provides individual tutoring based on each student's needs in mathematics and computer science. Students wishing to use the Math Lab must enroll in this course. (Non-Degree Credit)

**MATH 004 F Basic Mathematics I** **2 Units**  
36 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. Topics include arithmetic operations with whole numbers and fractions, rounding and estimation, and applied problems. Students are not permitted to use calculators. Pass/No Pass only. (Non-Degree Credit)

**MATH 006 F Basic Mathematics II** **2 Units**  
**Prerequisite(s):** MATH 004 F with a grade of Pass.

36 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. Topics include arithmetic operations and applied problems with decimals, rounding, estimation, ratios, problem solving with proportions, percent and applications, the arithmetic of denominate numbers, introduction to the metric system, and measurement geometry. Calculators will be required for selected topics. Pass/No Pass only. (Non-Degree Credit)

**MATH 007 F Essentials of Basic Math** **3 Units**  
54 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. The course includes arithmetic operations with whole numbers, fractions, decimals, and percent, estimation, and solving applied problems. Pass/No Pass only. (Non-Degree Credit)

**MATH 010 F Basic Mathematics** **4 Units**  
72 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. The course includes: operations of arithmetic with whole numbers, fractions, decimals; percent; estimation; equations and applied problems; introduction to the metric system; and the arithmetic of denominate numbers. Calculators will be required for selected topics. (Non-Degree Credit)

**MATH 015 F Pre-Algebra** **4 Units**  
72 hours lecture per term. This course includes operations on integers, fractions, mixed numbers and decimals, ratio, proportion and percentages, working with variable expressions, interpretation of statistical graphs, measurement and geometry, and an introduction to polynomials and graphing. Calculators will be required for selected topics. (Non-Degree Credit)

**MATH 020 F Elementary Algebra** **4 Units**  
**Advisory:** MATH 015 F or any previous algebra course.  
72 hours lecture per term. This course includes the properties of real numbers, factoring, exponents and radicals, solving and graphing linear equations, polynomials and rational algebraic expressions, and linear systems of equations. Calculators will be required for selected topics. (Degree Credit)

**MATH 024 F Pre-Statistics** **6 Units**  
108 hours lecture per term. This course is an accelerated pathway to prepare students for transfer-level statistics. It covers core concepts from elementary algebra, intermediate algebra, and descriptive statistics. Topics include ratios, rates and proportional reasoning; arithmetic reasoning using fractions, decimals and percents; evaluating expressions, solving equations, analyzing algebraic forms to understand statistical measures; use of linear, quadratic, absolute value, exponential, and logarithmic functions to model bivariate data; graphical and numerical descriptive statistics for quantitative and categorical data. (Degree Credit)

**MATH 026 F Support for Introductory Statistics****2 Units****Corequisite(s):** MATH 120 F.

Concurrent 36 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in statistics. Students must be concurrently enrolled in MATH 120 F. Topics include concepts from pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand college-level statistics. Concepts are taught through the context of descriptive data analysis. Additional emphasis is placed on solving and graphing linear equations and modeling with linear functions. Pass/No Pass only. (Degree Credit)

**MATH 030 F Plane Geometry****4 Units****Advisory:** MATH 020 F or any previous Algebra course.

72 hours lecture per term. This course is an introduction to Euclidean geometry and includes theorems and proofs, sets, congruent and similar polygons, circles, geometric constructions, areas, volumes, geometric loci, elementary logic and deductive reasoning. Calculators may be required for selected topics. (Degree Credit)

**MATH 031 F Support for College Algebra****2 Units****Corequisite(s):** MATH 141 F.

Concurrent 36 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in college algebra. Students must be concurrently enrolled in MATH 141 F. Topics include: a review of computational skills developed in intermediate algebra, factoring, operations on rational and radical expressions, absolute value equations and inequalities, exponential and logarithmic expressions and equations, conic sections, functions including domain and range, composition and inverses, and graphing. This course is appropriate for students who are confident in their beginning algebra skills. A graphing calculator is required. Pass/No Pass only. (Degree Credit)

**MATH 032 F Support for Calculus for Business****2 Units****Corequisite(s):** MATH 130 F.

Concurrent 36 hours lecture per term. This course covers the skills and concepts necessary for success in MATH 130 F is required. Topics include factoring polynomials, solving linear, quadratic, polynomial, and exponential equations, graphing lines and parabolas, laws of exponents and logarithms, functions, and solving systems of linear equations. Students must be concurrently enrolled in MATH 130 F. Pass/No Pass only. (Degree Credit)

**MATH 033 F Support for Liberal Arts Mathematics****1 Unit****Corequisite(s):** MATH 100 F.

Concurrent 18 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in liberal arts mathematics. Topics include rounding, calculator usage, percentages, operations with fractions, using formulas and solving equations. Students must be concurrently enrolled in MATH 100 F. Pass/No Pass only. (Degree Credit)

**MATH 034 F Support for Trigonometry****2 Units****Corequisite(s):** MATH 142 F.

Concurrent 36 hours lecture per term. This course is a review of the core prerequisite skills, competencies, and concepts needed in trigonometry. Students must be concurrently enrolled in MATH 142 F. Topics include: rational and radical expressions, laws of exponents, angles and triangles, graphing functions including transformations, calculator procedures, and geometry formulas. This course is appropriate for students who are confident in their beginning algebra skills. A graphing calculator is required. Pass/No Pass only. (Degree Credit)

**MATH 040 F Intermediate Algebra****4 Units****Prerequisite(s):** MATH 020 F with a grade of C or better or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This intermediate algebra course is appropriate for students preparing to take MATH 129 F, MATH 141 F, MATH 141HF, or MATH 142 F. This course includes products and factoring, exponents and radicals, fractions, functions and graphs, linear and quadratic equations, linear inequalities, logarithms and related topics at an intermediate level. Calculators will be used for selected topics. This course also meets the prerequisite for MATH 100 F, MATH 120 F, MATH 120HF and SOSC 120 F. Students who receive credit for MATH 040 F may not receive credit for MATH 041 F. (Degree Credit) AA GE

**MATH 041 F Combined Elementary and Intermediate Algebra****6 Units**

108 hours lecture per term. This course is designed for students who would like to complete elementary and intermediate algebra in one semester. It covers factoring, exponents, linear, quadratic, rational, and absolute value equations and inequalities, radical equations, operations with polynomials, radical and rational expressions, systems of equations and inequalities, linear, quadratic, exponential and logarithmic functions and their graphs, complex numbers, and conic sections. Students who have completed MATH 020 F may take MATH 040 F, MATH 041 F or MATH 043 F. However, students who receive credit for MATH 041 F may not receive credit for MATH 040 F. (Degree Credit) AA GE

**MATH 043 F Intermediate Algebra for Statistics and Liberal Arts****4 Units****Prerequisite(s):** MATH 020 F with a grade of C or better or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This course emphasizes applications, mathematical modeling of data and interpretation of results. The course includes linear, quadratic, rational, exponential and logarithmic functions and their graphs, solving equations involving these functions, solving linear inequalities, and solving systems of linear equations at an intermediate level. Graphing calculators will be required for selected topics. (Degree Credit) AA GE

**MATH 100 F Liberal Arts Mathematics****3 Units****Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 033 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 033 F as a concurrent support course instead of taking a prerequisite course. 54 hours lecture per term. This course provides an introduction to a variety of mathematical topics including the mathematics of finance, set theory, probability, statistics, logic or geometry, and other selected topics. It is designed for students majoring in liberal arts, education or communication. Calculators or computers may be used for selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MATH 120 F Introductory Probability and Statistics 4 Units**

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F, with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course.

**Advisory:** READ 096 F or reading skills clearance

Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course. 72 hours lecture per term. This course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 120 F may not receive credit for SOSC 120 F. (Degree Credit) (CSU) (UC Credit Limitation: MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF and SOSC 120 F combined maximum credit, one course) AA GE, CSU GE, IGETC (C-ID: MATH 110)

**MATH 120HF Honors Introductory Probability and Statistics 4 Units**

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F with a grade of C or better or by assessment through the college's multiple measures placement processes.

**Advisory:** READ 096 F or equivalent or by assessment through the college's multiple measures placement processes.

Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course. 72 hours lecture per term. This Honors-enhanced course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include: summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 120HF may not receive credit for SOSC 120 F. (Degree Credit) (CSU) (UC Credit Limitation: MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF and SOSC 120 F combined; maximum credit, one course) AA GE, CSU GE, IGETC (C-ID: MATH 110)

**MATH 121 F Enhanced Introductory Probability and Statistics 5 Units**

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F, with a grade of C or better or by assessment through the college's multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course.

**Advisory:** READ 096 F or reading skills clearance.

Some assessments may result in the student being required or recommended to take MATH 026 F as a concurrent support course instead of taking a prerequisite course. 90 hours lecture per term. This course contains the same content as MATH 120 F, but includes a fifth unit of instruction to help students who can benefit from additional support. This course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 121 F may not receive credit for MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF or SOSC 120 F. (Degree Credit) (CSU) AA GE, CSU GE, IGETC

**MATH 129 F College Algebra for Business Calculus 4 Units**

**Prerequisite(s):** MATH 040 F or MATH 041 F with a grade of C or better, or math skills clearance

72 hours lecture per term. This course includes a review of basic topics from intermediate algebra, equations and inequalities, functions and graphing including exponential and logarithmic functions, building mathematical models in business, finance and economics, systems of equations and inequalities, and an introduction to spreadsheets and/or graphing software. The course is designed for students planning to enroll in MATH 130 F. A scientific calculator will be required; a graphing calculator may be required. (This course does not meet requirements in the Business Division and will not substitute for BUS 151 F. See Business and Computer Information Systems Division for Business requirements.) (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE

**MATH 130 F Calculus for Business 4 Units**

**Prerequisite(s):** MATH 129 F with a grade of C or better or math skills clearance.

72 hours lecture per term. This course includes fundamentals of analytic geometry and calculus; differential calculus, integral calculus, and selected applications of calculus; functions and managerial planning and their use in economics and business. A scientific calculator will be required; a graphing calculator may be required. Computer applications may be included. (Degree Credit) (CSU) (UC Credit Limitation; MATH 130 F, MATH 151 F and MATH 151HF, combined maximum credit one course) AA GE, CSU GE, IGETC (C-ID: MATH 140)

**MATH 141 F College Algebra****4 Units**

**Prerequisite(s):** MATH 040 F or MATH 041 F, and MATH 030 F with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course. 63 hours lecture and 27 hours lab per term. This course is designed to prepare students for the study of calculus. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculators will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141HF and MATH 142 F are required for enrollment in MATH 151 F. (Degree Credit) (CSU) (UC Credit Limitation; MATH 141 F, MATH 141HF and MATH 129 F; combined maximum combined credit, 1 course) AA GE, CSU GE, IGETC

**MATH 141HF Honors College Algebra****4 Units**

**Prerequisite(s):** MATH 040 F or MATH 041 F, and MATH 030 F with a grade of C or better or by assessment through the college's multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course. 63 hours lecture and 27 hours lab per term. This Honors-enhanced course is designed to prepare students for the study of calculus. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculations will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141HF and MATH 142 F are required for enrollment in MATH 151 F. (Degree Credit) (CSU) (UC Credit Limitation; MATH 141 F, MATH 141HF and MATH 129 F combined; maximum credit, 1 course) AA GE, CSU GE, IGETC

**MATH 142 F Trigonometry****4 Units**

**Prerequisite(s):** MATH 040 F or MATH 041 F, and MATH 030 F, with a grade of C or better or by assessment through the college multiple measures placement processes. Some assessments may result in the student being required or recommended to take a concurrent support course, MATH 034 F, instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take a concurrent support course, MATH 034 F, instead of taking a prerequisite course. 72 hours lecture per term. This is a one-semester course in trigonometry designed to prepare students for the study of calculus. The topics to be covered include the following: algebraic skills, measurements of angles, trigonometric functions and inverse trigonometric functions, trigonometric equations and identities, graphing of trigonometric functions, solutions of triangles, applications, complex numbers, polar coordinates and DeMoivre's theorem. Graphing calculators will be used for selected topics. Course may be taken concurrently with MATH 141 F or MATH 141HF. Both MATH 141 F or MATH 141HF, and MATH 142 F are required for enrollment in MATH 151 F. (Degree Credit) (CSU) AA GE, CSU GE

**MATH 143 F Enhanced College Algebra****5 Units**

**Prerequisite(s):** MATH 030 F and MATH 040 F or MATH 041 F, with a grade of C or better or equivalent or by assessment through the college's multiple measures placement processes. Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course.

Some assessments may result in the student being required or recommended to take MATH 031 F as a concurrent support course instead of taking a prerequisite course. 81 hours lecture and 27 hours lab per term. This course is designed to prepare students for the study of calculus. This course contains the same content as MATH 141 F, but includes a fifth unit of instruction to help students who can benefit from additional support. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculators will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141HF or MATH 143 F, and MATH 142 F are required for enrollment in MATH 151 F. Students who receive credit for MATH 143 F may not receive credit for MATH 141 F or MATH 141HF. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**MATH 151 F Calculus I (formerly MATH 150AF)****4 Units**

**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F and MATH 142 F, with a grade of C or better, or by assessment through the college's multiple measures placement processes.

72 hours lecture per term. This course covers limits and continuity, differentiation of algebraic, transcendental and inverse functions, applications of differentiation, antiderivatives and indefinite integrals, and the definite integral. Graphing calculators or related software will be used for selected topics. (Degree Credit) (CSU) (UC Credit Limitation: MATH 130 F, MATH 151 F and MATH 151HF combined; maximum credit, one course) AA GE, CSU GE, IGETC

- MATH 151HF Honors Calculus I (formerly MATH 150HF) 4 Units**  
**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F and MATH 142 F, with a grade of C or better, or by assessment through the college's multiple measures placement processes.  
 72 hours lecture per term. This Honors-enhanced course covers limits and continuity, differentiation of algebraic, transcendental and inverse functions, applications of differentiation, anti-derivatives and indefinite integrals, and the definite integral. Graphing calculators will be used for selected topics. (Degree Credit) (CSU) (UC Credit Limitation: MATH 130 F, MATH 151 F and MATH 151HF, combined maximum credit one course) AA GE, CSU GE, IGETC (C-ID: MATH 210)
- MATH 152 F Calculus II (formerly MATH 150BF) 4 Units**  
**Prerequisite(s):** MATH 151 F or MATH 151HF, with a grade of C or better  
 72 hours lecture per term. This is a second semester calculus course covering differential equations, applications of integration, integration techniques, improper integrals, sequences and series, conics, parametric equations, and polar coordinates. Graphing calculators will be used for selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 220)
- MATH 152HF Honors Calculus II 4 Units**  
**Prerequisite(s):** MATH 151 F or MATH 151 HF, with a grade of C or better  
 72 hours lecture per term. This Honors-enhanced second semester calculus course covers differential equations, applications of integration, integration techniques, improper integrals, sequences and series, conics, parametric equations, and polar coordinates. Graphing calculators will be used for selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 220)
- MATH 170 F Discrete Structures 4 Units**  
**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F, with a grade of C or better, and MATH 142 F, with a grade of C or better  
**Advisory:** MATH 151 F or MATH 151HF.  
 72 hours lecture per term. This course covers fundamental topics for Computer Science such as logic, proof techniques, sets, introduction to computer programming, basic counting rules, relations, functions and recursion, graphs and probability trees. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 160)
- MATH 171 F Discrete Mathematics 4 Units**  
**Prerequisite(s):** MATH 141 or MATH 141HF or MATH 143 F, and MATH 142 F with a grade of C or better, or equivalent or by assessment through the college's multiple measures placement processes.  
 72 hours lecture per term. This is one of two courses in fundamental discrete mathematical concepts and techniques needed in computer-related disciplines. The topics covered include logic, truth tables, Boolean algebra, logic circuits, elementary set theory, functions, relations, proof techniques, combinatorics, elementary probability, and recurrence relations. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- MATH 172 F Graph Theory and Linear Algebra 4 Units**  
**Prerequisite(s):** MATH 141 F or MATH 141HF or MATH 143 F, and MATH 142 F, with a grade of C or better or by assessment through the college's multiple measures placement processes.  
 72 hours lecture per term. This is one of two courses in fundamental discrete mathematical concepts and techniques needed in computer related disciplines. Topics include the theory of graphs, trees, finite state machines, and linear algebra including matrix operations, eigenvalues, vector spaces, linear transformations, and inner product spaces. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- MATH 203 F Mathematics for Future Elementary Teachers 3 Units**  
**Prerequisite(s):** MATH 100 F or MATH 120 F or MATH 121 F or MATH 120HF or MATH 129 F or MATH 130 F or MATH 141 F or MATH 143 F or MATH 141HF or MATH 142 F or MATH 151 F or MATH 151HF or MATH 152 F or MATH 152HF or MATH 170 F or MATH 171 F or MATH 172 F or MATH 251 F or MATH 252 F or MATH 253 F or MATH 255 F or MATH 260 F, with a grade of C or better.  
 54 hours lecture per term. This course is designed for prospective elementary teachers. Topics covered include: problem-solving techniques, whole numbers and numeration, set theory, elementary number theory, integers, rational numbers, ratios, proportions, decimals, and percents. The course includes instruction delivery design and activity-based explorations. (Degree Credit) (CSU) AA GE
- MATH 251 F Multivariable Calculus (formerly MATH 250AF) 4 Units**  
**Prerequisite(s):** MATH 152 F or MATH 152HF, with a grade of C or better  
 72 hours lecture per term. This is a third semester course in calculus covering solid analytic geometry, vectors in three dimensions, vector calculus, differential calculus of functions of several variables, multiple integration, vector fields and theorems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 230)
- MATH 252 F Linear Algebra and Differential Equations (formerly MATH 250BF) 4 Units**  
**Prerequisite(s):** MATH 251 F with a grade of C or better  
 72 hours lecture per term. This is a fourth semester calculus course covering matrices, determinants, vector spaces, ordinary differential equations of the first order, linear second-order differential equations, power series and numerical solutions, and Laplace transformations. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- MATH 253 F Additional Topics in Linear Algebra (formerly MATH 250CF) 2 Units**  
**Corequisite(s):** MATH 252 F with a grade of C or better.  
 36 hours lecture per term. This course completes the introduction to Linear Algebra begun in MATH 252 F. Topics covered include linear transformations and their properties, the Dimension-sum theorem, matrices of linear transformations, inner product spaces and their properties, orthogonality, the Gram-Schmidt process, diagonalizability of symmetric matrices, and simplifying quadratic forms. (Degree Credit) (CSU) (UC) AA GE
- MATH 255 F Linear Algebra 3 Units**  
**Prerequisite(s):** MATH 152 F or MATH 152HF, with a grade of C or better  
 54 hours lecture per term. This course develops the techniques and theory needed to solve and classify systems of linear equations. Solution techniques include row operations, Gaussian elimination, and matrix algebra. Properties of vectors in two and three dimensions are investigated, leading to the notion of an abstract vector space. Vector space and matrix theory are presented including topics such as inner products, norms, orthogonality, eigenvalues, eigenspaces, and linear transformations. Selected applications of linear algebra are included. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 250)
- MATH 260 F Ordinary Differential Equations 3 Units**  
**Prerequisite(s):** MATH 152 F or MATH 152HF, with a grade of C or better  
**Advisory:** MATH 251 F.  
 54 hours lecture per term. This course is an introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. This course introduces the theoretical aspects of differential equations, including establishing when solution(s) exist, and techniques for obtaining solutions, including series solutions and singular points, Laplace transformations and linear systems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MATH 240)

**MATH 290 F Pure Mathematics Seminar 2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This course is structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems in pure/theoretical mathematics such as real analysis, complex analysis, geometry, topology, number theory, logic, experimental mathematics, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. MATH 290 F and MATH 290HF differ from other Mathematics Seminars in that the topics are exclusively devoted to theoretical mathematics and proofs in it. Seminar courses in mathematics can be taken in any order. (Degree Credit)(CSU) (UC Review required)

**MATH 290HF Honors Pure Mathematics Seminar 2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This Honors-enhanced courses offers students pure mathematics seminars which are structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems in pure/theoretical mathematics such as real analysis, complex analysis, geometry, topology, number theory, logic, experimental mathematics, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. MATH 290 F and MATH 290HF differ from other Mathematics Seminars in that the topics are exclusively devoted to theoretical mathematics and proofs in it. Topics assigned to honors students will emphasize additional rigor and depth, and honors students will participate in local, regional, and/or national competitions and conferences in mathematical science. Seminar courses in mathematics can be taken in any order. (Degree Credit) (CSU) (UC Review required)

**MATH 291 F Applied Mathematics Seminar 2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. Historically, covered topics are new each time this course is offered and taught topics are never repeated, to ensure currency. This course is structured in order to engage students in applied mathematics topics such as numerical analysis, dynamical systems, cosmology, finance, mathematical biology, inverse problems, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. (Degree Credit) (CSU) (UC Review required)

**MATH 291HF Honors Applied Mathematics Seminar 2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This Honors-enhanced course will engage students in applied mathematics topics such as numerical analysis, dynamical systems, cosmology, finance, mathematical biology, inverse problems, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. (Degree Credit) (CSU) (UC Review required)

**MATH 295 F General Mathematics Seminar 2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better assessment through the college multiple measures placement processes.

36 hours lecture per term. This course is structured in order to engage students in a diverse number of dynamical mathematical subjects, including cutting-edge unsolved problems, abstract, interdisciplinary, computational, and experimental mathematics, mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. Topics are of varying rigor and depth, depending on progress in the field and the abilities of the participants. (Degree Credit) (CSU) (UC Review required)

**MATH 295HF Honors General Mathematics Seminar 2 Units**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

36 hours lecture per term. This Honors-enhanced course offers math seminars which are structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems, abstract, interdisciplinary, computational, and experimental mathematics, mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. An enriched approach in this course is designed for students in the Honors program. Topics are of varying rigor and depth, depending on progress in the field and the abilities of the participants. (Degree Credit) (CSU) (UC review required)

**MATH 299 F Mathematics Independent Study 1 Unit**

**Prerequisite(s):** MATH 040 F with a grade of C or better or by assessment through the college multiple measures placement processes.

18 hours lecture or scheduled conferences per term. This course is for able students who wish to increase their knowledge of multiple areas of pure and/or applied mathematics through individual study and small group conferences. (Degree Credit) (CSU) (UC review required)

## Mathematics Associate in Science Degree

### Requirements

**PROGRAM CODE:** 2S03871

The **Mathematics Associate in Science Degree** is designed to prepare students to transfer to colleges and universities that offer bachelor's degrees in mathematics. Students with a degree in mathematics may pursue careers in a variety of industries such as education, finance, insurance, information technology, engineering and operations, manufacturing, consulting, analysis, research, and more. This degree requires a total of 18-21 units.

NOTE: Students planning to transfer to a local CSU may also want to consider the Mathematics AS-T Degree.

Code	Title	Units
<b>Required Courses (12 units):</b>		
MATH 151 F	Calculus I (formerly MATH 150AF)	4
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4



**Restricted Electives (6-9 units):****6-9**

*NOTE: MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF and SOSC 120 F are considered equivalent courses; however, MATH 120 F and MATH 120HF are recommended for this degree.)*

CSCI 123 F	Introduction to Programming Concepts in C ++	
MATH 120 F	Introductory Probability and Statistics	4
	or MATH 120HF Honors Introductory Probability and Statistics	
	or MATH 121 F Enhanced Introductory Probability and Statistics	
MATH 170 F	Discrete Structures	4
MATH 171 F	Discrete Mathematics	4
MATH 172 F	Graph Theory and Linear Algebra	4
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
MATH 253 F	Additional Topics in Linear Algebra (formerly MATH 250CF)	2
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
PHYS 221 F	General Physics I	4

**Total Units** **18-21**

## Program Student Learning Outcomes

**Outcome 1:** Analyze a mathematical function.

**Outcome 2:** Determine and use an appropriate method to solve a mathematical problem.

## Mathematics Associate in Science Degree for Transfer

Division: Mathematics and Computer Science

### Requirements

PROGRAM CODE: 2S30708

The **Mathematics Associate in Science Degree for Transfer**, also called the Mathematics AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in mathematics. Ed Code Section 66746-66749 states students earning the Mathematics AS-T Degree will be granted priority for admission as a Mathematics major to a local CSU, as determined by the CSU campus to which the student applies. Students with a degree in mathematics may pursue careers in a variety of industries such as education, finance, insurance, information technology, engineering and operations, manufacturing, consulting, analysis, research, and more. The Mathematics AS-T Degree requires a total of 18-20 units.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. (1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (12 units):</b>		
MATH 151 F	Calculus I (formerly MATH 150AF)	4
	or MATH 151HF Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
	or MATH 152HF Honors Calculus II	
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4

**Select six units from Lists A and B, with at least 3 units from List A (6 units):**

<b>List A (3-6 units):</b>		
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
MATH 252 F & MATH 253 F	Linear Algebra and Differential Equations (formerly MATH 250BF) and Additional Topics in Linear Algebra (formerly MATH 250CF)	6

**NOTE:** MATH 252 F and MATH 253 F must both be taken for either to count toward the degree. 6

**List B (4-5 units):**

**If only one course was selected from List A, select one course from List B.**

CSCI 123 F	Introduction to Programming Concepts in C ++	4
CSCI 223 F	C Language for Math and Science	4
MATH 120 F	Introductory Probability and Statistics	4
	or MATH 120HF Honors Introductory Probability and Statistics	
	or MATH 121 F Enhanced Introductory Probability and Statistics	
MATH 170 F	Discrete Structures	4
PHYS 221 F	General Physics I	4

**TOTAL UNITS:** **18-20**

## Program Student Learning Outcomes

**Outcome 1:** Analyze a mathematical function.

**Outcome 2:** Determine and use an appropriate method to solve a mathematical problem.

# Medical Technology

Division: Natural Sciences

## Degrees/Certificates

- Medical Technology Associate in Arts Degree (p. 402)

## Medical Technology Associate in Arts Degree

Division: Natural Sciences

### Requirements

PROGRAM CODE: 2A18799

The **Medical Technology Associate in Arts Degree** Program requires a total of 18 units chosen from the courses listed below.

Code	Title	Units
<b>Required Courses (18 units):</b>		<b>18</b>
ANAT 231 F	General Human Anatomy	4
ANAT 240 F	Human Physiology	5
BIOL 266 F	General Zoology	5
BIOL 272 F	Cell and Molecular Biology	4
CHEM 101 F	Chemistry for Allied Health Science	5
CHEM 107 F	Preparation for General Chemistry	5
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
MATH 141 F	College Algebra	4
MATH 142 F	Trigonometry	4
MICR 220 F	Medical Microbiology	4
MICR 262 F	General Microbiology	5
PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II	4
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Safe and proficient use of laboratory equipment and techniques.

**Outcome 2:** Knowledge of biological processes from the molecular and cellular perspectives.

## Music

Division: Fine Arts

### Music Major General Requirements

As a music major, students are expected to declare a performance area (voice, piano, or other instrument), to participate in at least one large performing group each semester, to be enrolled in Concert Hour each semester, to be enrolled in music theory and musicianship each semester, and to perform for student recitals and faculty juries on their major instrument each semester unless special exemption has been allowed. In addition to studying their major instrument each semester, students are

urged to develop as much facility on the piano as possible because of its importance in other areas of their musical training.

### Applied Music

Four-year colleges vary in the amount of applied music credit that may be applied to the Baccalaureate degree. Students are cautioned to check the catalog of the college they plan to attend for its specific statement on the amount of applied music credit that will count toward the degree.

### Faculty

Bruce Babad  
 Aram Barsamian  
 Nicola Bertoni Dedmon  
 Markus Burger  
 Mario Gonzelez  
 Joseph Jewell  
 Monica Lee  
 David Lopez  
 Allen Menton  
 Michael Scott  
 Jamie Shew  
 Jeremy Siskind  
 Chad Willis

### Degrees and Certificates

- Commercial Music Associate in Arts Degree (p. 412)
- Music Associate in Arts Degree (p. 412)
- Music Associate in Arts Degree for Transfer (p. 413)
- Music Recording/Production Certificate (p. 414)
- Piano Teaching Certificate (p. 414)

### Courses

**MUS 001 F Instrumental Performance Practicum** **0.5-3 Units**  
 9-54 hours lab per term. This course is for students who wish to increase their knowledge of instrumental performance. Various topics will be offered. Consult the class schedule to verify credit for a particular semester.

**MUS 021 F Piano Pedagogy I** **3 Units**  
**Prerequisite(s):** Piano Audition

54 hours lecture and 18 hours lab per term. This course is designed for those interested in starting or continuing a career in piano teaching. The emphasis is on evaluating various pedagogical methods and skills for teaching beginning and elementary level students. Class activities include examining current piano method books, studio policy, business law, communication skills, networking, lectures, presentations and guest speakers. Letter Grade or Pass/No Pass option.

**MUS 022 F Piano Pedagogy II** **3 Units**  
**Prerequisite(s):** Audition

54 hours lecture and 18 hours lab per term. This course is designed for those interested in starting or continuing a career in piano teaching. Students will evaluate various pedagogical methods and skills for teaching intermediate and early advanced repertoires. Class activities include peer-teaching, piano competition, business etiquette, lesson plans, tutoring, adjudication, job interview, journal preparation, lectures and guest speakers. Letter Grade or Pass/No Pass option.

**MUS 070 F Musical Theatre Techniques** **2 Units**  
 36 hours lecture per term. Students will participate in an in-depth analysis and application of the skills necessary for the performance in the styles of Musical Theatre, from audition to performance. Pass/No Pass only.

- MUS 081 F Music Tour Practicum** 0.5-3 Units  
0-54 hours lecture and 0-108 hours lab per term. This course is for students who wish to increase their knowledge and skills in a practical concert tour. This class will involve the students in the preparation, management, and performance venues appropriate for the genre. Various topics will be offered. Unit credit may range from .5 to 3 units in any given semester. Consult the class schedule to verify credit for a particular semester.
- MUS 100 F Music Laboratory** 1-2 Units  
54-108 hours lab per term. For each 54 hours beyond the music requirements that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room Suite 1114, one unit of credit will be granted. All hours must be verified by computer sign in. Pass/No Pass only. Open Entry/Open Exit. (CSU) (Degree Credit)
- MUS 101 F Music Fundamentals** 3 Units  
54 hours lecture per term. This course is designed for the person whose music reading skills are non-existent or very limited. Emphasis is upon learning by tapping rhythm patterns and singing melodic materials, but includes enough basic music terminology, rhythm and pitch notation, intervals, scales, meter and key signatures to make this possible. This course is open to all students but should be of special interest to prospective music majors, church choir members, and others who want to develop skills in music reading and fundamentals of music theory. (Degree Credit) (CSU) (UC) AA GE, CSU GE
- MUS 102 F Introduction to College Musicianship (formerly Music Reading)** 1 Unit  
*Corequisite(s)*: MUS 106 F with a grade of C or better.  
Concurrent 18 hours lecture and 18 hours lab per term. This is an introductory course in college-level ear-training, sight singing, and musicianship skills for the music major. This course includes developing melodic and rhythmic performance skills as well as melodic and rhythmic dictation. (Degree Credit) (CSU) (UC) (C-ID: MUS 110)
- MUS 103 F Beginning Musicianship** 1 Unit  
*Prerequisite(s)*: MUS 106 F with a grade of C or better  
*Advisory*: MUSA 131 F  
Corequisite: MUS 107 F with a grade of C or better. 36 hours lecture per term. This is the first course in ear-training, sight singing, and musicianship skills for the music major. It includes developing melodic and rhythmic performance skills as well as melodic, harmonic, and rhythmic dictation. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 125)
- MUS 104 F Intermediate Musicianship** 1 Unit  
*Prerequisite(s)*: MUS 103 F with a grade of C or better  
*Advisory*: MUSA 131 F  
Corequisite: MUS 109 F with a grade of C or better. 36 hours lecture per term. This course is a continuation of MUS 103 F. It includes the development, at increasingly more difficult levels of melodic and rhythmic performance skills as well as melodic, harmonic, and rhythmic dictation. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 135)
- MUS 106 F Introduction to College Music Theory** 3 Units  
*Prerequisite(s)*: MUS 101 F with a grade of C or better.  
*Advisory*: MUSA 131 F  
54 hours lecture per term. This course is designed as the entry-level music theory class for music majors, this course includes basic music terminology, rhythm and pitch notation, clefs, scales, intervals, triads (and inversions), and seventh chords. Basic keyboard will also be introduced, along with a concise outline of the major style periods of music history. The ability to read music is strongly recommended and desirable. This course provides essential background for more advanced courses in music theory. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: MUS 110)
- MUS 107 F Music Theory I (formerly Harmony)** 3 Units  
*Prerequisite(s)*: MUS 102 F and MUS 106 F with a grade of C or better  
*Advisory*: MUSA 131 F  
Concurrent Corequisite: MUS 103 F with a grade of C or better. 54 hours lecture per term. This course is the second course in music theory for music majors and includes four-part writing, cadences, non-harmonic tones, seventh chords, chord inversions, figured bass symbols, and diatonic chord progressions. (CSU) (UC) (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: MUS 120)
- MUS 108 F Introduction to Music Technology** 2 Units  
36 hours lecture per term. This course covers and explores the fundamental vocabulary, methods, concepts and devices used in contemporary music production and related media fields, including sound fundamentals, consumer audio equipment, personal computers and software, recording studios, electronic music, audio-visual productions, trade publications, relevant conventions, and employment opportunities. (CSU) (Degree Credit)
- MUS 109 F Music Theory II (formerly MUS 107BF Harmony II)** 3 Units  
*Prerequisite(s)*: MUS 107 F with a grade of C or better  
*Advisory*: MUSA 131 F  
Concurrent Corequisite: MUS 104 F with a grade of C or better. 54 hours lecture per term. This course follows MUS 107 F in the music theory sequence. It includes secondary dominants, modulation to closely related keys, melodic structure (phrase and period), species counterpoint, and an introduction to formal structure (binary, ternary and compound). (Degree Credit) (CSU) (UC) (C-ID: MUS 130)
- MUS 110 F Electronic Music I: Beginning Music Production** 3 Units  
*Prerequisite(s)*: MUS 108 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course covers the history of electronic music, the classical tape lab, and the analogue voltage controlled synthesizer, as well as the fundamentals of electronic music theory and techniques for instrument synthesis and sound design. (CSU) (Degree Credit) AA GE, CSU GE
- MUS 112 F The Music Business** 2 Units  
36 hours lecture per term. This course provides an introduction to intellectual property law, copyright forms, and agreements between songwriter, publisher, recording artist, producer, and personal management. This course takes an extensive look at the history of music business and how proof of authorship is possible. This course also explores the business dynamics of the music and entertainment industries. (CSU) (Degree Credit)
- MUS 113 F Jazz History - An Appreciation** 3 Units  
54 hours lecture per term. This course provides a historical study of jazz music, America's only original musical art form. The focus will be on developing for the student an appreciation and understanding of the music with secondary emphasis on the historical and cultural conditions which influenced each era of jazz music: Dixieland, Swing, Cool Jazz, Bebop, Free jazz, and Fusion. Active directed listening will be the primary activity in the classroom. Out-of-class activities will include music, listening and concert attendance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- MUS 116 F Music Appreciation** 3 Units  
54 hours lecture per term. This course is designed for the non-music major, and explores musical development from Middle Ages/Renaissance to the present. Emphasis is on active, directed listening to music and the discussion of choral, orchestral, solo, opera, and chamber works. Out-of-class activities include music listening and concert attendance. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MUS 100)

- MUS 118 F Introduction to Opera** **3 Units**  
54 hours lecture and 18 hours lab per term. This course offers an Introduction to the standard operatic repertoire in terms of development of vocal style, dramatic structure, and performance tradition. This course emphasizes appreciation of the art of operatic singing, focusing on voice classification, vocal range and techniques, and dramatic values. Students are offered opportunities for attendance at operatic performances. Field trips may be required outside of regularly-scheduled class times. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- MUS 119 F History of Rock Music** **3 Units**  
54 hours lecture per term. This course presents a historical study of the music of a rock musician. The principal focus will be on the music with analysis, secondary emphasis is placed on the sociological, political, and economic conditions which so heavily influenced this musical genre's development. Listening Active, directed listening, will be the primary function activity in the classroom. Out-of-class activities will include music listening and concert attendance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC
- MUS 120 F Survey of Music History** **3 Units**  
54 hours lecture per term. This course is a survey of the history of western art music from antiquity through the twentieth century including the contributions of other cultures with selected readings, recordings, and score analysis. Emphasis is placed on cultural influences, performance practices, media, composers, and characteristics of each style period. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: MUS 100)
- MUS 122 F Advanced Music Business** **2 Units**  
**Prerequisite(s):** MUS 112 F with a grade of C or better  
This course builds on the information covered in and is meant to be sequential to MUS 112 F. This course covers the following topics in greater depth: artist management, marketing and promotion, venue management and promotion, music supervisor and music product sales and development. This course also explores new media and online methods for promotion and distribution. Guest speakers will appear according to availability. (CSU) (Degree Credit)
- MUS 124 F Recording Lab I - Beginning Techniques** **3 Units**  
**Prerequisite(s):** MUS 108 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course explores the fundamental concepts in audio recording technology, including lab business practices, microphones, mixers, signal processors, the sound field, monitors, recording and editing devices, synchronization, and production techniques. (CSU) (Degree Credit)
- MUS 125 F Recording Techniques Workshop for Performers** **3 Units**  
36 hours lecture and 54 hours lab per term. This course is designed for the music performer enrolled in a college performance ensemble that is involved in making a performance tape, CD, DVD or TV show. This course includes recording, use of click tracks, mike placement/set up, use of headphones, proper overdubbing techniques, lip syncing when needed and developing advanced lab performance skills. Enrollment in this class is available only to students who are enrolled in a college performing group or small ensemble that is recording during the term the class is being offered or as a Recording/Production Career Technical Education student. (CSU) (Degree Credit)
- MUS 156 F Beginning Jazz Improvisation - Instrumental** **1 Unit**  
**Advisory:** MUS 106 F.  
18 hours lecture and 36 hours lab per term. This course will give students a working knowledge of reading music and the ability to play major scales up to three sharps and three flats from memory. This course is designed for the beginning instrumental musician with an emphasis upon techniques of rhythmic, melodic and harmonic improvisation. Students will learn the art of constructing a melodic solo that is rhythmically and harmonically appropriate. (CSU) (UC) (Degree Credit)
- MUS 170 F Opera Workshop** **1 Unit**  
**Advisory:** Audition.  
18 hours lecture and 18 hours lab per term. This course is an in-depth analysis of the musical, linguistic, and stylistic skills necessary for the learning and memorization of operatic repertoire. Emphasis is placed on music preparation for the Opera Production Performance. Course may be taken four times for credit. (CSU) (Degree Credit)
- MUS 171 F Opera Production Performance** **2 Units**  
**Advisory:** Students are admitted by audition.  
18 hours lecture and 54 hours lab per term. This course is an in-depth analysis and application of the skills necessary for the performance in the styles of opera theatre from audition to performance, with an emphasis on blocking/acting, character development. This course may be taken four times for credit. (Degree Credit) (CSU)
- MUS 172 F Opera Theatre Workshop** **2 Units**  
**Advisory:** Audition  
18 hours lecture and 54 hours lab per term. This course is an in-depth analysis and application of the skills necessary for the performance in the styles of opera theatre from audition to performance. Course may be taken four times for credit. (Degree Credit) (CSU)
- MUS 180 F Collegiate Chorale** **1 Unit**  
**Advisory:** Audition  
18 hours lecture and 36 hours lab per term. This course will cover standard choral literature which will be rehearsed and performed with an emphasis on basic choral techniques. This course is open to all students with limited or no singing experience. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 181 F Women's Chorale** **1 Unit**  
**Advisory:** Audition  
18 hours lecture and 36 hours lab per term. This is a performing group which performs traditional choral music for treble voices in styles from the Baroque, Classical, Romantic, and Contemporary periods. This course is open to students with limited or no singing experience. Course may be taken four times for credit. (CSU) (UC) (C-ID: MUS 180)
- MUS 196HF Honors Creative Arts - Music** **3 Units**  
54 hours lecture per term. This Honors-enhanced course explores the nature of creativity through exposure to the performing arts, literature and the fine arts. Honors students will make independent investigation into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students are required to attend museums, concerts and theatrical performances. Students who receive credit in this course may not receive credit in THEA 196HF or ART 196HF. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

- MUS 203 F Music Theory III (formerly Counterpoint) 3 Units**  
**Prerequisite(s):** MUS 109 F with a grade of C or better  
**Advisory:** MUSA 131 F  
 Corequisite: MUS 204 F with a grade of C or better. This course introduces formal analysis of 18th century forms (Sonata and Rondo) and explores, through analysis and writing, modal borrowing, Neapolitan and augmented sixth chords, 9th, 11th, and 13th chords, and altered dominant chords. (Degree Credit) (CSU) (UC) (C-ID: MUS 140)
- MUS 204 F Advanced Musicianship 1 Unit**  
**Prerequisite(s):** MUS 104 F with a grade of C or better  
**Advisory:** MUSA 131 F  
 Corequisite: MUS 203 F with a grade of C or better. 36 hours lecture per term. This course is a continuation of MUS 104 F. It includes the development of, at increasingly more difficult levels, melodic and rhythmic sight singing, along with melodic, harmonic, and rhythmic dictation. (Degree Credit) (CSU) (UC) (C-ID: MUS 145)
- MUS 205 F Pop and Commercial Music Theory 3 Units**  
**Prerequisite(s):** MUS 109 F with a grade of C or better  
 Concurrent Corequisite: MUS 206 F with a grade of C or better. 54 hours lecture per term. This advanced music theory class provides an intensive study of harmonic material as used in popular music and jazz. This course includes the study of chord progressions, substitutions, harmonic alterations and musical form. Special attention is paid to great American composers such as Duke Ellington and Cole Porter. (Degree Credit) (CSU) (UC)
- MUS 206 F Pop and Commercial Musicianship 1 Unit**  
**Prerequisite(s):** MUS 104 F with a grade of C or better  
 Corequisite: MUS 205 F with a grade of C or better. 36 hours lecture per term. This course is designed to enhance the student's aural skills through several different approaches to pop, jazz and commercial music. The course includes drills and exercises in three areas: singing of jazz-related scales and arpeggios, basic conducting skills and the transcription of pop harmony centered upon the music of the Beatles. (Degree Credit) (CSU) (UC) (C-ID: MUS 155)
- MUS 207 F Pop/Commercial Arranging/Composing 3 Units**  
**Prerequisite(s):** MUS 205 F with a grade of C or better  
 54 hours lecture per term. This course provides analysis of contemporary and traditional songs and the study of techniques of scoring for various combinations of voices and instruments. This course places emphasis on using modern orchestration and scoring projects to be performed and recorded for class members. (CSU) (Degree Credit)
- MUS 208 F Music Copying and Notation Software 2 Units**  
**Prerequisite(s):** MUS 106 F with a grade of C or better  
 36 hours lecture per term. This is a vocational, career-oriented course that covers the preparation of professional-quality manuscripts, vocal scores, and instrumental scores as well as transposition of instruments and copying from full instrumental scores. This course is open to all music majors, music teachers, or performers. (CSU) (Degree Credit)
- MUS 224 F Recording Studio II - Intermediate Techniques 3 Units**  
**Prerequisite(s):** MUS 124 F with a grade of C or better  
 36 hours lecture and 72 hours lab per term. This course provides an introduction to digital audio concepts, recorders, synchronization, and the digital audio workstation. Students will be assigned projects in the recording facilities. (CSU) (Degree Credit)
- MUS 226 F Recording Studio III - Advanced Techniques 3 Units**  
**Prerequisite(s):** MUS 224 F with a grade of C or better or Audition  
 36 hours lecture and 72 hours lab per term. This class is the final of three sequential recording studio classes. Student project work focuses on advanced recording techniques necessary to record and organize recording sessions for large choirs, ensembles and orchestras. (Degree Credit) (CSU)
- MUS 256 F Advanced Jazz Improvisation - Instrumental 1 Unit**  
**Prerequisite(s):** MUS 156 F with a grade of C or better or Audition  
 18 hours lecture and 36 hours lab per term in the Rhythm Laboratory, recording Studio, or Music Library with emphasis upon intermediate techniques of rhythmic, melodic, and harmonic improvisation. (CSU) (UC) (Degree Credit)
- MUS 259 F Steel Drum Ensemble 1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 18 hours lab per term. Lectures and demonstrations are combined with student performances that provide information and opportunities toward the goal of live musical performances in the Steel Pan Ensemble. Emphasis will be placed on sight reading and improvisation of music from Trinidad, modern jazz, and classical arrangements. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- MUS 260 F Guitar Ensemble 1 Unit**  
**Advisory:** Audition  
 18 hours lecture and 18 hours lab per term. Students will rehearse and perform original and transcribed guitar ensemble literature from the Renaissance to contemporary styles; performances are required of all students. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 185)
- MUS 261 F String Ensemble 1 Unit**  
**Advisory:** Audition  
 18 hours lecture and 18 hours lab per term. This course includes the rehearsal and performance of standard and current string ensemble literature. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 262 F Woodwind Ensemble 1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 18 hours lab per term. This class will consist of study, rehearsal, and performance of Woodwind Ensemble music. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 263 F Brass Ensemble 1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 36 hours lab per term. This course is based upon performance of brass ensemble literature from all major stylistic periods in music. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 264 F Percussion Ensemble 1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 36 hours lab per term. This course explores the rehearsal and public performance of standard percussion ensemble literature. This course is designed for music majors, but is open to all students. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)

- MUS 265 F Piano Ensemble** **1 Unit**  
**Prerequisite(s):** MUSA 136 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is designed to enhance ensemble-playing skills by focusing on rehearsal technique, balance, and hand coordination. Emphasis is on performing standard and current duo pieces, four-hand literature, and pieces requiring more than two pianos and/or other instruments. Participation in piano ensemble recital and performances is required. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 266 F Jazz Combo** **1 Unit**  
**Prerequisite(s):** Audition  
**Advisory:** MUS 106 F - students should be able to read music notation and play major scales up to four sharps and four flats from memory.  
 18 hours lecture and 36 hours lab per term. This course provides a combination of lectures and demonstrations with student performances, recordings, and tours are used to increase understanding and appreciation of many jazz genres and their relationship to modern American music. The ability to play suitable instruments is required. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 268 F Jazz Guitar Ensemble** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 18 hours lab per term. Lecture/demonstrations are combined with student performances to provide opportunities for learning and growth in the area of jazz guitar. Particular emphasis is placed on the application of advanced guitar techniques to standard jazz literature. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 269 F Alternative Jazz Lab Ensemble** **1 Unit**  
**Prerequisite(s):** Ability to play suitable instruments  
**Advisory:** MUS 106 F or basic skills on major instruments  
 18 hours lecture and 36 hours lab per term. This course combined with student performances is used to increase understanding and appreciation of many musical genres including Fusion, Latin Rock, Pop, Salsa, Indiana, Afro-Cuban music and their relationship to modern American composition. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 270 F Electronic Music Ensemble** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 36 hours lab per term. This course allows students to learn to play collaborative works suitable for electronic music and synthesizer techniques. Develop interactive playing techniques with Ableton Live, Tactile controllers and electronically-modified acoustic instruments to realize avant-garde, techno-pop and dance music as well as improvised pieces with multi-media content. Course may be taken four times for credit. (Degree Credit) (C-ID: MUS 180)
- MUS 271 F Fullerton College Symphony** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 arranged hours in rehearsals, studio recording, and concerts. This course includes the rehearsal and public performance of standard orchestral literature both on campus and in surrounding communities. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)
- MUS 273 F Concert Band** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 36 hours lab per term. This course will rehearse and perform standard band literature. Public performances will be held at various locations. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE
- MUS 274 F Fullerton College Symphonic Winds** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 hours arranged in rehearsals, recordings, and concerts per term. This course will include rehearsals and performance of standard band literature. The performances will take place on campus and in the community. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)
- MUS 275 F Pep Band** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture and 36 hours lab per term. This course creates a performance opportunity for music majors to provide musical support to the Fullerton College Athletics program. The band will perform during football and basketball games and for special events. Emphasis is placed upon student leadership, and the performance literature is drawn from contemporary and traditional band sources. The emphasis of this course is on modern Pep Band ensemble literature. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- MUS 276 F Jazz Band** **1 Unit**  
**Prerequisite(s):** Audition  
**Advisory:** MUS 106 F and concurrent enrollment in MUS 274 F  
 18 hours lecture and 36 hours lab per term. This is a performing ensemble including studio recording, and concerts. Rehearsal, recording and concert performance of standard and current jazz fusion music. Student composition/arrangements encouraged. Open to all students by audition. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 277 F Jazz Lab Band** **1 Unit**  
**Prerequisite(s):** Audition  
**Advisory:** Concurrent enrollment in MUS 274 F  
 18 hours lecture and 36 hours lab per term. This course explores standard and current jazz/fusion and swing big band music. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 281 F Concert Choir** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 hours arranged lab per term in additional rehearsals, studio recordings, and concerts. This course covers standard choral literature which will be rehearsed and performed with an emphasis on early western music of the Renaissance and Baroque periods. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)
- MUS 282 F Fullerton College Master Chorale** **1 Unit**  
**Prerequisite(s):** Audition  
 18 hours lecture, 36 hours lab and 18 hours arranged in additional rehearsals, recordings, and concerts. This course is a performance oriented class and incorporates traditional choral literature of a sacred and secular nature. There will be at least one major work performed per year on campus and in the community. This course is open to students and to all residents of the North Orange County Community College District. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) AA GE (C-ID: MUS 180)

- MUS 284 F Advanced Topics in Music** 0.5-3 Units  
18-54 hours lecture and 18-54 hours lab per term. This course is designed to meet the various needs of music areas that required advanced training and continuing education as well as provide professional growth for persons employed in the music business, production, recording, and performing fields. This course will be offered in modules of advanced topics. Unit credit may range from .5 to 3 units per module. Consult the class schedule to verify topic areas and credit offered for each topic. (Degree Credit)
- MUS 285 F Chamber Singers** 1 Unit  
*Advisory:* Audition  
18 hours lecture and 36 hours lab per term. In this course, choral chamber music literature will be rehearsed and performed on campus in surrounding communities and schools and occasionally on tours. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 286 F Vocal Jazz Lab Singers** 1 Unit  
*Advisory:* Audition  
This performance ensemble uses 2-3 part vocal jazz literature to teach the fundamentals of jazz harmony, blend, style, interpretation, and improvisation within a vocal group setting. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
- MUS 287 F Vocal Jazz Ensemble** 1 Unit  
*Prerequisite(s):* Audition  
18 hours lecture, 36 hours lab and 18 hours arranged in rehearsals, studio recordings, workshops, festival competitions and concerts. The students in this course will rehearse and perform standard and current music from the Vocal Jazz genre. The vocalists will be accompanied by a small instrumental ensemble. There will be a secondary emphasis upon vocal improvisation in the scat style. Student compositions and arrangements are encouraged. Course may be taken four times for credit. (Degree Credit) (CSU) (UC) (C-ID: MUS 180)
- MUS 291 F Electronic Music II - Intermediate Music Production** 3 Units  
*Prerequisite(s):* MUS 110 with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course explores the procedures, instruments, and techniques used in a contemporary DAW/ MIDI synthesizer studio and the use of sequencers, editor/librarians, intelligent arrangers, algorithmic composers, and non-linear editing in a digital audio workstation. Students will do scoring projects and acquire advanced techniques in Digital Performer and Protools. Other DAW's may include Reason, Logic and Ableton Live. (CSU) (Degree Credit)
- MUS 292 F Electronic Music III - Advanced Music Production** 3 Units  
*Prerequisite(s):* MUS 110 F with a grade of "C" or better  
36 hours lecture and 54 hours lab per term. This course offers advanced music production training in Logic Pro and Ableton Live. It represents the last class course in a sequence of three Electronic Music classes dedicated to the teaching of Advanced Music creation and production skills using state of the art Digital Audio Workstations to produce music for Film, TV and Interactive Media. (CSU) (Degree Credit)
- MUS 298 F Music Internship** 1-3 Units  
54-162 hours lab per term. This course is designed to enable the music student to understand and demonstrate competence in a professional recording/production work environment through the combination of extended classroom learning and the interaction of a professional supervisor. It is the responsibility of the student to pursue their own internship opportunity. (Degree Credit) (CSU)
- MUS 299 F Music Independent Study** 1 Unit  
*Advisory:* High scholarship music major evidenced by portfolio, advanced level performance, or instructor referral.  
54 hours independent study per term. This course is for advanced students who wish to pursue a particular area of music through individual study. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content; UC review required)
- MUSA 100 F Introduction to Music Laboratory** 1-2 Units  
*Corequisite(s):* MUSA 200 F with a grade of C or better.  
54 to 108 hours lab per term in the Computer Laboratory, Music Listening Library, or Practice Room Suite. This course is taken in conjunction with MUSA and includes the private lessons, directed learning time (coaching), and practice time required for that class. Pass/No Pass only. (CSU) (Degree Credit)
- MUSA 101 F Beginning Music Lab** 1-2 Units  
*Prerequisite(s):* MUSA 100 F with a grade of Pass or C or better.  
*Corequisite:* MUSA 200 F with a grade of Pass or C or better. 54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room, one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the second semester of MUSA 200 F. Open Entry/Open Exit. Pass/No Pass only. (CSU) (Degree Credit)
- MUSA 102 F Intermediate Music Laboratory** 1-2 Units  
*Prerequisite(s):* MUSA 101 F with a grade of Pass  
*Corequisite:* MUSA 200 F with a grade of Pass. 54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room, one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the third semester of MUSA 200 F. Pass/No Pass only. (CSU) (Degree Credit)
- MUSA 103 F Advanced Music Laboratory** 1-2 Units  
*Prerequisite(s):* MUSA 102 F with a grade of C or better  
*Corequisite:* MUSA 200 F with a grade of Pass. 54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room Suite one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the fourth semester of MUSA 200 F. Open Entry/Open Exit. Pass/No Pass only. (CSU) (Degree Credit)
- MUSA 104 F Introduction to Concert Hour** 1 Unit  
18 hours lecture per term. This course is designed for the first semester music major, providing the student with opportunities to expand their knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Fullerton College Music Department concerts and the preparation of concert reports. This course is required of all music majors but open to all students. (CSU) (Degree Credit) AA GE
- MUSA 105 F Beginning Concert Hour** 1 Unit  
*Prerequisite(s):* MUSA 104 F with a grade of C or better  
18 hours lecture per term. This course is designed for the second semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Music Department concerts and the preparation of concert reports. (CSU) (Degree Credit)

- MUSA 106 F Intermediate Concert Hour** 1 Unit  
*Prerequisite(s)*: MUSA 105 F with a grade of C or better  
 18 hours lecture per term. This course is designed for the third semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Music Department concerts and the preparation of concert reports. (CSU) (Degree Credit)
- MUSA 107 F Advanced Concert Hour** 1 Unit  
*Prerequisite(s)*: MUSA 106 F with a grade of C or better  
 18 hours lecture per term. This course is designed for the fourth semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Fullerton College concerts and the preparation of concert reports. (CSU) (Degree Credit)
- MUSA 110 F Fundamentals of Voice Training for Non-Majors** 1 Unit  
*Advisory*: Audition.  
 18 hours lecture and 18 hours lab per term. This course is the study of fundamentals of singing techniques in a class situation. Topics include instruction in tone production, breath control, pronunciation, and choice of song literature. Out of class time includes 1 hour of practice time in Practice Room per week and preparation for recitals. Open to all students and intended for avocational and inexperienced singers. (Degree Credit) (CSU) (UC)
- MUSA 111 F Beginning Voice** 1 Unit  
*Advisory*: Audition.  
 18 hours lecture and 18 hours lab per term. This course is an entry level class for inexperienced singers who wish to explore the Voice Major. Providing a study of basic vocal techniques, the course explores tone production, breath control, pronunciation, and choice of song literature. Required out of class activities include one hour practice in Practice Room per week and participation in recitals. Field trips may be required outside of regularly scheduled class times. (Degree Credit) (CSU) (UC)
- MUSA 112 F Intermediate Voice I** 1 Unit  
*Advisory*: MUSA 110 F or MUSA 111 F or Audition.  
 18 hours lecture and 18 hours lab per term. This course, which provides a study of vocal literature and techniques in a class situation, emphasizes individual progress in tone production, breath control and diction. Repertoire is primarily 18th and 19th century Italian songs and arias. The course is designed for the voice major not yet qualified for MUSA 200 F or the Advanced Voice classes and for promising non-majors. Out of class activities include one hour of practice per week in Practice Room Suite and preparation for recitals. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC)
- MUSA 113 F Intermediate Voice II** 1 Unit  
*Advisory*: MUSA 112 F or Audition.  
 18 hours lecture and 18 hours lab per term. This course, which is a study of vocal literature and techniques, emphasizes individual progress in tone production, breath control and diction. The course is designed for the more advanced non-major, or the voice major not yet qualified for Applied Voice-Individual Instruction or Advanced Voice. This course continues to build on the skills learned and practiced in MUSA 112 F. Repertoire is primarily 18th and 19th century Italian songs and arias. Out of class activities include one hour of practice per week in Practice room, and preparation for recitals. Field trips may be required outside of regularly scheduled class times. (Degree Credit) (CSU) (UC)
- MUSA 120 F Beginning Guitar** 1 Unit  
 18 hours lecture and 18 hours lab per term. This course focuses on the fundamentals of playing the guitar: technique, note reading, scales, chords, simple picking and strumming patterns. The repertoire includes a wide variety of musical styles, from classical to rock. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC)
- MUSA 121 F Intermediate Guitar** 1 Unit  
*Advisory*: MUSA 120 F.  
 18 hours lecture and 18 hours lab per term. This course is designed for the more advanced non-guitar major or the guitar major who is not yet qualified for Classical or Jazz Guitar, this course continues the study of guitar study from MUSA 120 F with emphasis on more advanced literature and techniques. Emphasis is placed on individual progress in execution and interpretation. (CSU) (UC)
- MUSA 130 F Introduction to Piano for Non-Music Majors** 1 Unit  
 18 hours lecture and 18 hours lab per term. This course is designed for non-music majors whose piano skills are non-existent or very limited. It provides an introduction to the fundamentals of piano playing: posture, keyboard topography, note reading, 5-finger-pattern exercises, sight-reading, and piano repertoires. It is open to all students. Letter Grade/Pass/No Pass option. (CSU) (UC) (Degree Credit)
- MUSA 131 F Keyboard Skills I** 1 Unit  
*Prerequisite(s)*: MUSA 130 F with a grade of Pass or C or better  
*Advisory*: MUSA 136 F  
 18 hours lecture and 18 hours lab per term. This course is designed for music majors preparing for a university keyboard proficiency exam, this course is the entry-level keyboard musicianship class with emphasis on basic keyboard harmonization, hand independence, transposition, sight-reading, rhythm accuracy and elementary piano repertoires. (CSU) (UC) (Degree Credit)
- MUSA 132 F Keyboard Skills II** 1 Unit  
*Prerequisite(s)*: MUSA 131 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is a continuation of MUSA 131 F for music majors. It includes emphasis on basic keyboard harmonization using primary chord inversions, technique, transposition, accompaniment patterns, rhythm accuracy and late elementary/early intermediate piano repertoires. (CSU) (UC) (Degree Credit)
- MUSA 134 F Jazz Piano Technique and Repertoire I** 1 Unit  
*Prerequisite(s)*: MUSA 130 F with a grade of Pass or C or better or Audition  
 18 hours lecture and 18 hours lab per term. This is an introductory jazz piano course in which students will learn to improvise over the blues form using the blues scale, analyze standard tunes harmonically and play ii-V-i progression using shell voicings, Bud Powell shells and rootless voicings. (CSU) (UC) (Degree Credit)
- MUSA 136 F Beginning Piano Sight-Reading** 1 Unit  
*Prerequisite(s)*: MUSA 130 F with a grade of Pass or C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is designed for those majoring in piano whose sight-reading skill is almost nonexistent. Piano sight-reading strategies will include familiarity with keyboard topography, vertical and horizontal groupings of notes and recognition of rhythm patterns. Students will read simple arrangements of popular and famous tunes. Also recommended for those enrolled in MUSA 131 F. (CSU) (UC) (Degree Credit)



- MUSA 137 F Intermediate Piano Sight-Reading** 1 Unit  
*Prerequisite(s)*: MUSA 136 F with a C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is designed for piano majors and is a continuation of MUSA 136 F and includes reading various styles of intermediate-level solo piano repertoire, ensemble, accompaniments and reading chord symbol notation. (CSU) (UC) (Degree Credit)
- MUSA 140 F Introduction to Strings (formerly Introduction to Strings for Non-Majors)** 1 Unit  
 18 hours lecture and 18 hours lab per term. This course is an exploratory study of the violin, viola, cello or string bass in a classroom situation. It presents the basic fundamentals of string technique and music reading. Since no previous experience is necessary, the course is open to all students. (CSU) (UC) (Degree Credit)
- MUSA 141 F Beginning Strings** 1 Unit  
*Advisory*: MUSA 140 F.  
 18 hours lecture and 18 hours lab per term. This course is offered to majors and non-majors who wish to become familiar with the basic fundamentals of violin, viola, cello, and/or string bass techniques. Students are required to practice at least two hours per week. Emphasis is placed on sound production, articulation, and basic music sight reading and theory. In addition, more basic concepts of teaching methods are presented in order to help prepare those wishing to enter the teaching industry at the elementary and middle school levels teaching private or group string classes. (Degree Credit) (CSU) (UC)
- MUSA 142 F Intermediate Strings** 1 Unit  
*Advisory*: MUSA 141 F.  
 18 hours lecture and 18 hours lab per term. This course teaches the intermediate fundamentals of violin, viola, cello, and/or string bass techniques; more intermediate-level string techniques are presented such as shifting, vibrato and tuning. (CSU) (UC)
- MUSA 150 F Introduction to Woodwinds for Non-Majors** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 18 hours lab per term. This course offers an introduction to the flute, oboe, bassoon, clarinet, or saxophone in a class situation. No previous experience is necessary. This course is open to all students (CSU) (UC) (Degree Credit)
- MUSA 151 F Beginning Woodwinds** 1 Unit  
*Prerequisite(s)*: Audition  
 18 hours lecture and 18 hours lab per term. This course provides a challenging introduction to the study of flute, oboe, bassoon, clarinet, or saxophone in a class setting. Although this course is designed for music majors, it is open to all students. (CSU) (UC) (Degree Credit)
- MUSA 152 F Intermediate Woodwinds** 1 Unit  
*Prerequisite(s)*: MUSA 150 F or MUSA 151 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is a study of Woodwind literature and techniques in a class situation. Emphasis is placed on individual progress in tone production, breath support, technique, and intonation. The course is designed for more advanced non-majors, or for music majors not yet qualified for advanced woodwinds. (CSU) (UC) (Degree Credit)
- MUSA 161 F Beginning Brass** 1 Unit  
 18 hours lecture and 18 hours lab per term. This course provides an introductory level study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Since no previous brass experience is necessary, it is open to all students. Students must provide their own instruments. (CSU) (UC) (Degree Credit)
- MUSA 162 F Intermediate Brass** 1 Unit  
*Prerequisite(s)*: MUSA 161 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course is an intermediate level study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Some prior experience in playing a brass instrument is necessary. Students must provide their own instruments. (CSU) (UC) (Degree Credit)
- MUSA 170 F Introduction to Percussion (formerly Introduction to Percussion for Non-Majors)** 1 Unit  
 18 hours lecture and 18 hours lab per term. This course is a study of the techniques and rhythmic theory needed to perform the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be identified and discussed. (CSU) (UC) (Degree Credit)
- MUSA 171 F Introduction to Drum Set** 1 Unit  
*Advisory*: MUSA 170 F.  
 18 hours lecture and 18 hours lab per term. This course will teach students the fundamentals of popular drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. The instructor will give group and individual instruction and present an overview of basic percussion technique, rhythmic theory and Jazz, Rock, Latin and Pop drumming styles. Students should be prepared to practice one half hour a day outside of class. (CSU) (Degree Credit)
- MUSA 172 F Intermediate Percussion** 1 Unit  
*Advisory*: MUSA 170 F.  
 18 hours lecture and 18 hours lab per term. This course is a continuation study of the techniques and rhythmic theory needed for intermediate level performance of the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be instructed and performed. (Degree Credit) (CSU) (UC)
- MUSA 173 F Intermediate Percussion - Drum Set** 1 Unit  
*Advisory*: MUSA 171 F.  
 18 hours lecture and 18 hours lab per term. Students will learn popular drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. Instructor will give group and individual instruction and present an overview of Jazz, Rock, Latin, and Pop drumming styles. Students should be prepared to practice one half hour a day, outside of class. (CSU) (UC) (Degree Credit)
- MUSA 191 F Intermediate Vocal Jazz Styling and Improvisation I** 1 Unit  
*Advisory*: Audition  
 18 hours lecture and 18 hours lab per term. This course is designed to give vocal students beginning training in jazz styling techniques, rhythmic and melodic improvisation, and the fundamentals of lead sheet writing. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library. Students should have prior training in the fundamentals of voice and music theory. (CSU) (UC) (Degree Credit)
- MUSA 192 F Intermediate Vocal Jazz Styling and Improvisation II** 1 Unit  
*Prerequisite(s)*: MUSA 191 F with a grade of C or better  
 18 hours lecture and 18 hours lab per term. This course is designed to give vocal students intermediate training in jazz styling techniques, vocal improvisation, and basic lead sheet writing. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library. (CSU) (Degree Credit)

- MUSA 200 F Applied Music - Individual Private Study** 1 Unit  
**Advisory:** Audition  
 18 hours lecture per term. This course provides individual instruction in applied techniques and interpretation of musical literature. Participation in recitals, juries and performance evaluations are required. Areas of study include guitar, orchestral and band instruments, percussion, piano, and voice. Course may be taken four times for credit. (Degree Credit) (CSU) (UC review required) (C-ID: MUS 160)
- MUSA 201 F Advanced Applied Music - Master Class (formerly titled Advanced Applied Music - Individualized Private Study)** 1 Unit  
**Prerequisite(s):** MUSA 200 F with a grade of C or better  
 18 hours lecture per term. This course provides advanced individual instruction in applied techniques and interpretation of musical literature. Participation in recitals, juries and performance evaluations are required. Areas of study include guitar, orchestral & band instruments, percussion, piano, and voice. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)
- MUSA 202 F Applied Private Instruction** 1 Unit  
**Advisory:** Audition  
 This course offers individual instruction in applied techniques and interpretation of musical literature. Participation in recitals, juries, and performance evaluations is required. Instruments of study include guitar, orchestral instruments, piano, percussion, and voice. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)
- MUSA 203 F Advanced Applied Private Instruction** 1 Unit  
**Advisory:** MUSA 202 F and Audition.  
 18 hours lecture per term. This course offers individual instruction in advanced applied techniques and advanced interpretation of musical literature. Participation in recitals, juries, and performance evaluations is required. Instruments of study include guitar, orchestral instruments, piano, percussion, and voice. Course may be taken two times for credit. (Degree Credit) (CSU) (UC review required)
- MUSA 210 F Advanced Voice** 1 Unit  
**Advisory:** MUSA 112 F or Audition.  
 18 hours lecture and 18 hours lab per term. This course offers individual instruction in vocal techniques and interpretation of solo voice literature in a class situation. Emphasis is placed upon repertoire and public performance. Participation in recitals plus one hour practice per week is required. Designed for music majors but open to all students. Field trips may be required outside of regularly-scheduled times. (Degree Credit) (CSU) (UC)
- MUSA 211 F Advanced Voice-German Lieder** 1 Unit  
**Advisory:** MUSA 112 F or Audition  
 18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of German Lieder in a class situation, emphasizes, repertoire and public performance. Out of class activities include one hour practice in the Practice Room per week and participation in recitals. Although designed for music majors, this course is open to all students. Field trips may be required outside of regularly- scheduled class times. (Degree Credit) (CSU)
- MUSA 212 F Advanced Voice-French Melodie** 1 Unit  
**Advisory:** MUSA 112 F or Audition  
 18 hours lecture and 18 hours lab per term. This course, which provides Individual instruction in vocal techniques and interpretation of French Melodie in a class situation, emphasizes learning and performing French repertoire. Out of class activities include one hour practice per week and participation in recitals. Although designed for music majors, this course is open to all students. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- MUSA 213 F Advanced Voice-Spanish Cancion** 1 Unit  
**Advisory:** MUSA 112 F or Audition.  
 18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of Spanish Canciones, emphasizes repertoire and public performance. Out of class activities include one hour practice in Practice Room per week and participation in recitals. Although designed for music majors this course is open to all students. (Degree Credit) (CSU) (UC)
- MUSA 214 F Advanced Voice-English and American Art Song** 1 Unit  
**Advisory:** MUSA 112 F or Audition  
 18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of English and American Art Songs in a class situation, emphasizes repertoire and public performance. Out of class activities include one hour practice in Practice Room per week and participation in recitals. Although designed for music majors, this course is open to all students. (CSU) (UC) (Degree Credit)
- MUSA 220 F Advanced Guitar I (formerly Classical Guitar: Renaissance to Baroque)** 1 Unit  
**Advisory:** MUSA 121 F.  
 18 hours lecture and 18 hours lab per term. This course is designed for music majors, this course provides intensive individual instruction in guitar techniques and interpretation of solo guitar literature. Emphasis on building repertoire and performing music from the Renaissance to Baroque periods. (Degree Credit) (CSU) (UC)
- MUSA 221 F Advanced Guitar II (formerly Classical Guitar: Classical to Contemporary)** 1 Unit  
**Advisory:** MUSA 121 F  
 18 hours lecture and 18 hours lab per term. This course is designed for music majors, this advanced class provides intensive individual instruction in guitar techniques and interpretation of solo guitar literature. Emphasis is placed on building repertoire and performing music from the Classical Music to Contemporary periods. (Degree Credit) (CSU) (UC)
- MUSA 223 F Jazz Guitar: Scales and Arpeggios** 1 Unit  
**Advisory:** MUSA 121 F  
 18 hours lecture and 18 hours lab per term. This course is designed to advance the student's ability in a variety of jazz guitar styles with specific emphasis on improvisation in a single-line (linear) style. Linear playing will explore both scales and arpeggios and their incorporation into improvised melodies over a variety of chord changes. Students should have at least intermediate playing skills (at least two years guitar playing experience) and some knowledge of music theory. Music reading is not necessary, but is advised. Previous exposure to playing jazz is not required. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)
- MUSA 224 F Jazz Guitar: Chords** 1 Unit  
**Advisory:** MUSA 121 F or by Audition  
 18 hours lecture and 18 hours lab per term. This class is designed to advance the student's ability in a variety of jazz guitar styles with specific emphasis on chord playing, which will be addressed in both accompaniment and solo playing. Students should have at least intermediate playing skills (2 years guitar playing experience) and some knowledge of music theory. Music reading is not necessary, but is advised, for success in this class. Previous exposure to playing jazz is not required. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)

- MUSA 231 F Keyboard Skills III** 1 Unit  
**Prerequisite(s):** MUSA 132 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course follows MUSA 132 F in keyboard musicianship sequence. Individualized instruction will focus on keyboard harmony using primary and secondary chords, introduction to basic score reading, transposing to concert pitch, rhythm, and early intermediate/intermediate piano repertoires including classical, blues, national and folk tunes. (CSU) (UC) (Degree Credit)
- MUSA 232 F Keyboard Skills IV** 1 Unit  
**Prerequisite(s):** MUSA 231 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab. This course is an advanced level in keyboard musicianship sequence. Rigorous individualized instruction will focus on keyboard harmony using secondary dominant chords, 3-voice choral score reading, specialized rhythm, intermediate to late intermediate standard repertoires, memorization, and self-critiquing skills. (CSU) (UC) (Degree Credit)
- MUSA 234 F Jazz Piano Technique and Repertoire II** 1 Unit  
**Prerequisite(s):** MUSA 134 F with a grade of C or better  
 18 hours lecture and 18 hours lab. This course, which is a continuation of MUSA 134 F for jazz piano majors, builds on playing standard jazz repertoire for solo piano and piano trio, jazz theory and practicing strategies. Students will learn to play and improvise over minor ii-V-i progression using shell and rootless voicings. (CSU) (UC) (Degree Credit)
- MUSA 236 F Advanced Piano: Baroque to Classical** 1 Unit  
**Prerequisite(s):** MUSA 137 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This course provides individualized instruction and lecture on piano techniques and interpretation of baroque and classical piano repertoire for pianists. (CSU) (UC) (Degree Credit)
- MUSA 237 F Advanced Piano: Romantic to Contemporary** 1 Unit  
**Prerequisite(s):** MUSA 137 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab per term. This advanced class for piano majors studies Romantic to Contemporary keyboard literature and techniques. Emphasis will be on individual progress in building musical vocabulary, phrasing, articulations, technique, and interpretation. (CSU) (UC) (Degree Credit)
- MUSA 240 F Advanced Strings** 1 Unit  
**Advisory:** MUSA 142 F.  
 18 hours lecture and 18 hours lab per term. This course, which follows MUSA 142 F, provides rigorous instruction for violin, viola, cello, and/or string bass techniques. Students are required to practice at least 2 hours per week. More advanced-level string techniques are presented, including higher fingerboard positions, double-stops, and more difficult key signatures for the string player. (CSU) (UC) (Degree Credit)
- MUSA 250 F Advanced Woodwinds I** 1 Unit  
**Prerequisite(s):** MUSA 152 F with a grade of C or better or Audition.  
 18 hours lecture and 18 hours lab per term. Designed for the woodwind major, this course provides Individual instruction in woodwind techniques and ensemble interpretation of solo woodwind literature in a class situation. Emphasis is on repertoire and public performance. Participation in recitals is required. Although the course is designed for Music Majors, it is open to non-majors as well. (CSU) (UC) (Degree Credit)
- MUSA 251 F Advanced Woodwinds II** 1 Unit  
**Prerequisite(s):** MUSA 250 F with a grade of C or better or Audition.  
 18 hours lecture and 18 hours lab per term. For the advanced woodwind player, this course provides intensively individualized instruction in woodwind techniques and interpretation of solo woodwind literature in a class situation. Emphasis is on continuation of technical and repertoire development. One or more woodwind instruments may be explored in this course. Participation in public recitals is required. (CSU) (UC) (Degree Credit)
- MUSA 260 F Advanced Brass I** 1 Unit  
**Prerequisite(s):** MUSA 162 F with a grade of C or better or Audition.  
 18 hours lecture and 18 hours lab per term. This course involves an advanced level instruction and study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Emphasis will be on technique, presentation, and execution of higher levels of repertoire. Designed for music majors but open to all students. Students must provide their own instruments. (CSU) (UC) (Degree Credit)
- MUSA 261 F Advanced Brass II** 1 Unit  
**Prerequisite(s):** MUSA 260 F with a grade of C or better or Audition.  
 18 hours lecture and 18 hours lab per term. This course involves the highest level of advanced instruction and study of the trumpet, trombone, French horn, euphonium or tuba in a classroom situation. Emphasis will be on technique, presentation, and execution of the highest levels of repertoire. This course is designed for music majors but it is open to all qualified students. Students must provide their own instruments. (CSU) (Degree Credit)
- MUSA 270 F Advanced Percussion I** 1 Unit  
**Advisory:** MUSA 172 F.  
 18 hours lecture and 18 hours lab per term. This course is a continuation study of the techniques and rhythmic theory needed for advanced level performance of the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be instructed and performed. (CSU) (UC) (Degree Credit)
- MUSA 271 F Advanced Percussion II** 1 Unit  
**Advisory:** MUSA 173 F.  
 18 hours lecture and 18 hours lab per term. Students will learn advanced drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. The instructor will give group and individual instruction and present an overview of Jazz, Rock, Latin, and Pop drumming styles and their many subcategories. Students should be prepared to practice one half hour per day, outside of class. (CSU) (UC) (Degree Credit)
- MUSA 290 F Advanced Vocal Jazz Styling and Improvisation I** 1 Unit  
**Prerequisite(s):** MUSA 192 F with a grade of C or better or Audition  
 18 hours lecture and 18 hours lab plus 4 hours arranged time in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and lead sheet writing on the latest notation computer software. Students will begin to compile a personal working songbook. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

**MUSA 291 F Advanced Vocal Jazz Styling and Improvisation II 1 Unit****Prerequisite(s):** MUSA 290 F with a grade of C or better

18 hours lecture and 18 hours lab plus 4 hours arranged time in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and fundamentals of arranging on the latest notation computer software. Students will add to their personal working songbook and begin to compile a promotional packet. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

**MUSA 292 F Advanced Vocal Jazz Styling and Improvisation III 1 Unit****Prerequisite(s):** MUSA 291 F with a grade of C or better

18 hours lecture and 18 hours lab plus 4 hours private coaching time per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and beginning arranging on the latest notation computer software. Students will continue building their personal working songbook and begin to compile a promotional packet. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

**MUSA 293 F Advanced Vocal Jazz Styling and Improvisation IV 1 Unit****Prerequisite(s):** MUSA 292 F with a grade of C or better

18 hours lecture and 18 hours lab and 4 hours in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and intermediate arranging on the latest notation computer software. Students will complete their personal working songbook and promotional packet for professional use. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

## Commercial Music Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03849

The **Commercial Associate in Arts Degree** provides training for those who do not plan to transfer to a four-year university or college. The emphasis is upon preparation of the performer, composer, or arranger. While most of the courses suggested are transferable, the curriculum does not meet the general education requirements for the lower division of a four-year university or college. This degree requires 19 units of which 16 units are in required courses. An additional 3 units must be chosen from the restricted electives listed below.

Code	Title	Units
<b>Required Courses (16 units):</b>		
MUS 108 F	Introduction to Music Technology	2
MUS 207 F	Pop/Commercial Arranging/Composing	3
MUS 224 F	Recording Studio II - Intermediate Techniques	3
Performance group each semester (1, 1, 1, 1)		4
Applied music class each semester (1, 1, 1, 1) (200 level)		4
<b>Restricted Electives (3 units):</b>		
MUS 112 F	The Music Business	2
MUS 113 F	Jazz History - An Appreciation	3
MUS 119 F	History of Rock Music	3

MUS 120 F	Survey of Music History	3
MUS 156 F	Beginning Jazz Improvisation - Instrumental	1
MUS 208 F	Music Copying and Notation Software	2

<b>Total Units</b>		<b>19</b>
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### Program Student Learning Outcomes

**Outcome 1:** Describe and execute the basic concepts of songwriting in respect to melody, harmony and rhythm.

**Outcome 2:** Explain the basics of intellectual property laws and copyright and Trademark protection.

**Outcome 3:** Produce basic songs in a variety of commercial music genres using Digital Audio Workstations.

**Outcome 4:** Perform or participate in a contemporary music production.

## Music Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03848

The **Music Associate in Arts Degree** is designed to provide students with the basic musical knowledge and academic skills to either transfer to a four-year academic institution or lead to employment in the music industry. This degree is designed to prepare students to demonstrate competence in the discipline of music in all of its facets, read and audiate music, and demonstrate proficiency in ensemble skills and solo performance skills. Completion of this curriculum will demonstrate commitment to the serious study of Music in practice and in theory. This degree may lead to employment in many fields of entertainment and different genres, including jazz, vocal, choral, instrumental, classical, rock, and music criticism. This degree requires a total of 37-38 units in the major in addition to other graduation requirements.

Code	Title	Units
<b>Required Courses (27 units):</b>		
MUS 102 F	Introduction to College Musicianship (formerly Music Reading)	1
MUS 103 F	Beginning Musicianship	1
MUS 104 F	Intermediate Musicianship	1
MUS 106 F	Introduction to College Music Theory	3
MUS 107 F	Music Theory I (formerly Harmony)	3
MUS 108 F	Introduction to Music Technology	2
MUS 109 F	Music Theory II (formerly MUS 107BF Harmony II)	3
MUS 203 F or MUS 205 F	Music Theory III (formerly Counterpoint) Pop and Commercial Music Theory	3
MUS 204 F or MUS 206 F	Advanced Musicianship Pop and Commercial Musicianship	1
MUS 120 F	Survey of Music History	3
MUSA 104 F	Introduction to Concert Hour	1
MUSA 105 F	Beginning Concert Hour	1
MUSA 106 F	Intermediate Concert Hour	1
MUSA 107 F	Advanced Concert Hour	1
MUSA 131 F	Keyboard Skills I	1

MUSA 132 F	Keyboard Skills II	1
<b>Applied Music - Select 1 unit per term for 4 terms from the following (4 units):</b>		<b>4</b>
MUSA 200 F	Applied Music - Individual Private Study <sup>1</sup>	1
MUSA 201 F	Advanced Applied Music - Master Class (formerly titled Advanced Applied Music - Individualized Private Study) <sup>2</sup>	1
MUSA 210 F	Advanced Voice	1
MUSA 220 F	Advanced Guitar I (formerly Classical Guitar: Renaissance to Baroque)	1
MUSA 236 F	Advanced Piano: Baroque to Classical	1
MUSA 240 F	Advanced Strings	1
MUSA 250 F	Advanced Woodwinds I	1
MUSA 260 F	Advanced Brass I	1
MUSA 270 F	Advanced Percussion I	1
<b>Performance Ensembles - Select 1 unit per term for 4 terms (4 units):</b>		<b>4</b>
MUS 180 F	Collegiate Chorale	1
MUS 181 F	Women's Chorale	1
MUS 260 F	Guitar Ensemble	1
MUS 261 F	String Ensemble	1
MUS 262 F	Woodwind Ensemble	1
MUS 263 F	Brass Ensemble	1
MUS 264 F	Percussion Ensemble	1
MUS 265 F	Piano Ensemble	1
MUS 266 F	Jazz Combo	1
MUS 268 F	Jazz Guitar Ensemble	1
MUS 269 F	Alternative Jazz Lab Ensemble	1
MUS 270 F	Electronic Music Ensemble	1
MUS 271 F	Fullerton College Symphony	1
MUS 273 F	Concert Band	1
MUS 274 F	Fullerton College Symphonic Winds	1
MUS 276 F	Jazz Band	1
MUS 277 F	Jazz Lab Band	1
MUS 281 F	Concert Choir	1
MUS 282 F	Fullerton College Master Chorale	1
MUS 285 F	Chamber Singers	1
MUS 287 F	Vocal Jazz Ensemble	1
<b>Restricted Electives (2-3 units):</b>		<b>2-3</b>
MUS 207 F	Pop/Commercial Arranging/Composing	3
MUS 208 F	Music Copying and Notation Software	2
<b>Total Units</b>		<b>37-38</b>

<sup>1</sup> MUSA 200 F and MUSA 201 F may be taken 4 times for credit.

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate college sophomore-level skill in solo performance on instrument of chosen concentration (Orchestral Instrument, Voice, Piano, Guitar)

**Outcome 2:** Demonstrate working knowledge and successful execution of college sophomore-level Music Theory and Musicianship.

**Outcome 3:** Demonstrate college sophomore-level proficiency in ensemble rehearsal and performance.

**Outcome 4:** Demonstrate college sophomore-level proficiency in identifying genres, styles, and periods of music through concert attendance and listening of recorded music.

## Music Associate in Arts Degree for Transfer

### Requirements

**PROGRAM CODE:** 2A31530

The **Music Associate in Arts Degree for Transfer**, also called the Music AA-T Degree, prepares students to transfer to California State University campuses that offer bachelor's degrees in Music. Ed Code Section 66746-66749 states that students earning the Music AA-T Degree will be granted priority for admission as Music major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE (p. 502) or IGETC (p. 509) and 23 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better. This degree is designed to prepare students to demonstrate competence and discipline in the study of music in all of its facets, read and audiate music, and demonstrate proficiency in ensemble skills and solo performance skills. While a baccalaureate degree is recommended for a possible career in music production, performance, and music education, completion of this curriculum will demonstrate commitment to the serious study of Music in practice and in theory, and provide comprehensive preparation for upper-division work. The Music AA-T Degree program requires 23 units in required courses and restricted electives as indicated below.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (23 units):</b>		
MUS 106 F	Introduction to College Music Theory	3
MUS 107 F	Music Theory I (formerly Harmony)	3

MUS 109 F	Music Theory II (formerly MUS 107BF Harmony II)	3
MUS 203 F	Music Theory III (formerly Counterpoint)	3
MUS 103 F	Beginning Musicianship	1
MUS 104 F	Intermediate Musicianship	1
MUS 204 F	Advanced Musicianship	1
MUSA 200 F	Applied Music - Individual Private Study <sup>1</sup>	4
<b>Four semesters of Music ensembles, selected from the list below</b>		<b>4</b>
<i>Large Ensembles</i>		
MUS 180 F	Collegiate Chorale	1
MUS 181 F	Women's Chorale	1
MUS 271 F	Fullerton College Symphony	1
MUS 274 F	Fullerton College Symphonic Winds	1
MUS 281 F	Concert Choir	1
MUS 282 F	Fullerton College Master Chorale	1
MUS 285 F	Chamber Singers	1
<i>Ensembles</i>		
MUS 260 F	Guitar Ensemble	1
MUS 261 F	String Ensemble	1
MUS 262 F	Woodwind Ensemble	1
MUS 263 F	Brass Ensemble	1
MUS 264 F	Percussion Ensemble	1
MUS 265 F	Piano Ensemble	1
MUS 266 F	Jazz Combo	1
MUS 268 F	Jazz Guitar Ensemble	1
MUS 269 F	Alternative Jazz Lab Ensemble	1
MUS 270 F	Electronic Music Ensemble	1
MUS 276 F	Jazz Band	1
MUS 277 F	Jazz Lab Band	1
MUS 287 F	Vocal Jazz Ensemble	1

The Music Department also recommends the completion of the following classes in preparation for a transfer to a California State University

MUS 108 F	Introduction to Music Technology	2
MUS 116 F	Music Appreciation	3
MUS 120 F	Survey of Music History	3

The Music Department also recommends the successful completion of MUSA 132 F or successful passage of a Piano Proficiency Exam.

**Total Units** 23

<sup>1</sup> MUSA 200 F must be taken 4 times to complete degree.

## Program Student Learning Outcomes

### Program Level Student Learning Outcomes

**Outcome 1:** Sophomore level skill in solo performance on instrument of chosen concentration (Orchestral Instrument, Voice, Piano, Guitar).

**Outcome 2:** Working knowledge and successful execution of Sophomore level Music Theory and Musicianship.

**Outcome 3:** Sophomore level proficiency in ensemble rehearsal and performance.

**Outcome 4:** Sophomore level proficiency in identifying genres, styles, and periods of music.

# Music Recording/Production Certificate

## Requirements

PROGRAM CODE: 2C08420

The **Music Recording/Production Certificate** is designed as a four semester program to provide the technical skills and theoretical background for a career in the music recording/music production field. The certificate requires a total of 31-32 units of required courses and restricted electives with a minimum grade of C or better in each course taken.

Code	Title	Units
<b>Required Courses (24 units):</b>		
MUS 108 F	Introduction to Music Technology	2
MUS 110 F	Electronic Music I: Beginning Music Production	3
MUS 112 F	The Music Business	2
MUS 116 F	Music Appreciation	3
or MUS 119 F	History of Rock Music	
MUS 124 F	Recording Lab I - Beginning Techniques	3
MUS 224 F	Recording Studio II - Intermediate Techniques	3
MUS 226 F	Recording Studio III - Advanced Techniques	3
MUS 291 F	Electronic Music II - Intermediate Music Production	3
MUS 292 F	Electronic Music III - Advanced Music Production	3
<b>Restricted Electives (6-7 units):</b>		<b>6-7</b>
MUS 101 F	Music Fundamentals	3
or MUS 106 F	Introduction to College Music Theory	
MUS 103 F & MUS 107 F	Beginning Musicianship and Music Theory I (formerly Harmony)	4
MUS 125 F	Recording Techniques Workshop for Performers	3
<b>Total Units</b>		<b>31-32</b>

## Program Student Learning Outcomes

### Program Level Student Learning Outcomes

**Outcome 1:** Understand and apply signal flow of the Recording Process on a real analog recording console as well as in a DAW.

**Outcome 2:** Write music in a variety of musical genres and is able to record individual components of his or her compositions.

# Piano Teaching Certificate

## Requirements

PROGRAM CODE: 2C08419A

The **Piano Teaching Certificate** is a two-semester program that is intended for anyone seeking to expand their teaching and playing skills. The certificate program is for potential piano teachers, and the sequence of

courses is designed to provide the technical skills, theoretical background, musical understanding, and historical background needed for effective teaching. The Piano Teaching Certificate Program requires a total of 30 units of which 24 units are in required courses. MUS 021 F and MUS 022 F Piano Pedagogy must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (24 units):</b>		
MUS 021 F	Piano Pedagogy I	3
MUS 022 F	Piano Pedagogy II	3
MUS 103 F	Beginning Musicianship	1
MUS 104 F	Intermediate Musicianship	1
MUS 107 F	Music Theory I (formerly Harmony)	3
MUS 109 F	Music Theory II (formerly MUS 107BF Harmony II)	3
MUS 120 F	Survey of Music History	3
MUS 265 F	Piano Ensemble <sup>1</sup>	2
MUSA 137 F	Intermediate Piano Sight-Reading	1
MUSA 200 F	Applied Music - Individual Private Study <sup>1</sup>	2
MUSA 236 F	Advanced Piano: Baroque to Classical	1
MUSA 237 F	Advanced Piano: Romantic to Contemporary	1
<b>Restricted Electives (6 units):</b>		
BUS 100 F	Introduction to Business	3
BUS 180 F	Small Business Management	3
CDES 115 F	Introduction to Early Childhood Education Curriculum	3
CDES 119 F	Music Education in Early Childhood (formerly CDES 123DF)	2
MUSA 136 F	Beginning Piano Sight-Reading	1
<b>Total Units</b>		<b>30</b>

<sup>1</sup> Course must be taken for two semesters.

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate effective piano teaching skills.

**Outcome 2:** Assess proper method books and supplementary materials appropriate for individual student age and level.

## Nutrition and Foods

Division: Natural Sciences

### Faculty

Rita Higgins  
Colleen Kvaska  
Michelle Loy  
Kristy Richardson

### Degrees and Certificates

- Nutrition and Dietetics Associate in Science Degree for Transfer (p. 416)
- Nutrition and Foods Associate in Arts Degree (p. 416)
- Nutrition and Foods Skills Certificate (p. 417)

## Courses

**FOOD 102 F Introduction to Foods (formerly FOOD 101AF) 3 Units**  
36 hours lecture and 54 hours lab per term. This course is designed to provide the student with knowledge of the fundamental scientific principles involved in food preparation, as well as practical experience in applying these principles to a wide variety of foods representative of those consumed in the U.S. Emphasis is placed on developing skills in utilizing appropriate basic scientific methodology to study the components of food and food products; and on acquiring a knowledge of, as well as applying, generally-accepted quality standards to such foods and food products. (Degree Credit) (CSU) (C-ID: NUTR 120)

**FOOD 110 F Food Safety and Sanitation 3 Units**  
54 hours lecture per term. In this course, students will examine basic principles of food safety and sanitation applied in the food service industry to comply with state regulations. Emphasis is placed on cause and control of foodborne illnesses, personal hygiene, food processing and storage methods, general safety regulations and accident prevention. National food handler or manager certification exam will be given. (Degree Credit) (CSU)

**FOOD 130 F Cultural Aspects of Food 3 Units**  
36 hours lecture and 54 hours lab per term. This course examines food as an expression of cultural unity and diversity. Students will investigate the many cultural influences on food choices and patterns. Preparation techniques and products from a variety of traditions as practiced in the United States will be explored. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU)

**FOOD 160 F Foods for Fitness (formerly FOOD 060 F) 2 Units**  
18 hours lecture and 54 hours lab per term. This course presents nutrition information to enhance knowledge about food choices. The principles of nutrition and food preparation are presented in a non-technical format. Students are able to apply new knowledge to their personal fitness, diet, and health goals. Labs include the planning and preparation of foods which are emphasized in the current Dietary Guidelines for Americans. (Degree Credit) (CSU)

**FOOD 170 F Vegetarian Cooking and Nutrition (formerly FOOD 070 F) 2 Units**  
18 hours lecture and 54 hours lab per term. This course is designed to develop a basic understanding of the vegetarian diet with practical applications in food preparation. Emphasis will be on the practical preparation of health-promoting food for the lacto, lacto-ovo vegetarian and vegan. (Degree Credit) (CSU)

**NUTR 100 F Careers in Nutrition and Foods 2 Units**  
36 hours lecture per term. This course will explore careers in nutrition and foods such as dietetics, culinary arts, hospitality, and food science. Trends, future employment projections, and employment opportunities will also be emphasized. (CSU) (Degree Credit)

**NUTR 210 F Human Nutrition 3 Units**  
54 hours lecture per term. This course is an introduction to the science of nutrition. Major principles, functions and sources of nutrients are discussed, as well as their relationship to health and disease. Chemistry and physiology are also discussed as they relate to nutrition. General application as it pertains to today's students is stressed. Students will analyze their food intake. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: NUTR 110)

**NUTR 210HF Honors Human Nutrition****3 Units**

54 hours lecture per term. This Honors-enhanced course is an introduction to the science of nutrition. Emphasis will be placed on major principles, functions and sources of nutrients, health and disease, as well as chemistry and physiology as they relate to nutrition. Application and development of the student's ability to critically evaluate current nutrition issues is stressed. Students will analyze their food intake. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: NUTR 110)

**NUTR 220 F Sports Nutrition****3 Units**

**Advisory:** NUTR 210 F or NUTR 210HF.

54 hours lecture per term. In this course, the principles of nutrition are studied and applied to athletes and active individuals. An emphasis is placed on energy and nutrient needs, pre- and post-event food choices, hydration, body composition, disordered eating, and supplements. This course also examines the cultural, sociological, and psychological influences related to nutrition, fitness, and athletic achievement. (Degree Credit) (CSU) AA GE, CSU GE

**NUTR 295 F Nutrition and Foods Internship****2-4 Units**

**Prerequisite(s):** NUTR 210 F or NUTR 210HF with a grade of C or better.

18 hours lecture and 60-180 hours of unpaid internship or 75-225 hours of paid internship per term. This course is designed to provide work experience directly related to the students area of study in Nutrition and Foods. This course gives students the opportunity to gain work experience in a professional setting in the nutrition or foods industry. (Degree Credit) (CSU)

## Nutrition and Dietetics Associate in Science Degree for Transfer

Division: Natural Sciences

### Requirements

PROGRAM CODE: 2S35804

The **Nutrition and Dietetics Associate in Science Degree for Transfer**, also referred to as the Nutrition and Dietetics AS-T degree (or ADT), prepares students to transfer to CSU campuses that offer bachelor's degrees in nutrition and dietetics. Ed Code Section 66746-66749 states students earning the Nutrition and Dietetics AS-T degree will be granted priority for admission as a Nutrition and Dietetics major to a local CSU, as determined by the CSU campus to which the student applies. This degree introduces students to the principles and methodologies used in the study of nutrition and dietetics and allows students to acquire the foundational knowledge necessary to pursue post-secondary degrees in nutrition and dietetics. Coursework includes instruction in nutrition, foods, psychology, chemistry, and microbiology. The Nutrition and Dietetics AS-T degree requires a total of 27-29 units of required courses as indicated below.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).

- b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

2. Obtainment of a minimum grade point average of 2.0.

3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core (16 units):</b>		
CHEM 111AF	General Chemistry I	5
MICR 262 F	General Microbiology	5
NUTR 210 F or NUTR 210HF	Human Nutrition Honors Human Nutrition	3
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
<b>List A: Select two courses (8-10 units):</b>		<b>8-10</b>
ANAT 231 F	General Human Anatomy	4
or ANAT 240 F	Human Physiology	
CHEM 111BF	General Chemistry II	5
CHEM 211AF	Organic Chemistry I	5
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
or PSY 161 F	Elementary Statistics for Behavioral Science	
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
or SOSC 120 F	Introduction to Probability and Statistics	
<b>List B: Select one course (3 units):</b>		<b>3</b>
FOOD 102 F	Introduction to Foods (formerly FOOD 101AF)	3
FOOD 130 F	Cultural Aspects of Food	3
<b>Total Units</b>		<b>27-29</b>

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to evaluate diet and foods.

**Outcome 2:** Apply nutritional concepts in the planning of meals and the preparation of food.

## Nutrition and Foods Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03865

The **Nutrition and Foods Associate in Arts Degree** includes coursework that is applicable to a transfer program at selected universities and colleges in the field of Dietetics, Food and Nutrition. Within the field of Nutrition and Foods, professionals work in healthcare, education and research, business and industry. Careers are also available in government agencies, food service management, fitness, food companies and in private practice. This degree requires completion of 22-24 units, of which 14 are in required



courses. Select 2 courses from the restricted electives below so that a minimum of 22 units are completed.

Code	Title	Units
<b>Required Courses (14 units):</b>		
FOOD 102 F	Introduction to Foods (formerly FOOD 101AF)	3
FOOD 110 F	Food Safety and Sanitation	3
FOOD 130 F	Cultural Aspects of Food	3
NUTR 100 F	Careers in Nutrition and Foods	2
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
<b>Restricted Electives (8-10 units):</b>		<b>8-10</b>
ANAT 231 F	General Human Anatomy	4
ANAT 240 F	Human Physiology	5
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
MATH 142 F	Trigonometry	4
MICR 262 F	General Microbiology	5
PHYS 130 F	Elementary Physics	4
<b>Total Units</b>		<b>22-24</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to evaluate diet and foods.

**Outcome 2:** Apply nutritional concepts in the planning of meals and the preparation of food.

## Nutrition and Foods Skills Certificate

Division: Natural Sciences

### Requirements

PROGRAM CODE: 2C39440

The Nutrition and Foods Skills Certificate is designed to provide students with fundamental knowledge and skills in nutritional science, food science, food preparation, and food safety and sanitation. The required courses prepare students for entry-level positions in nutrition and foods. Examples of entry-level positions include nutrition assistants for community agencies such as The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and Head Start, diet aides or diet clerks in hospitals, and dietary service workers in hospitals or school food service. This certificate requires a total of 13-14 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (11 units):</b>		
NUTR 100 F	Careers in Nutrition and Foods	2
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
FOOD 102 F	Introduction to Foods (formerly FOOD 101AF)	3
FOOD 110 F	Food Safety and Sanitation	3

<b>Restricted Electives (2-3 units):</b>		<b>2-3</b>
FOOD 130 F	Cultural Aspects of Food	3
FOOD 160 F	Foods for Fitness (formerly FOOD 060 F)	2
FOOD 170 F	Vegetarian Cooking and Nutrition (formerly FOOD 070 F)	2
<b>Total Units</b>		<b>13-14</b>

## Program Student Learning Outcomes

**Outcome 1:** Explain nutrient needs and how diet and lifestyle choices impact health.

**Outcome 2:** Differentiate between proper and improper food safety and sanitation techniques.

**Outcome 3:** Determine the correct preparation methods and access the quality of a wide variety of foods.

## Paralegal Studies

Division: Business and Computer Information Systems

The Fullerton College Paralegal Studies Program approved by the American Bar Association (ABA) offers an Associate in Science Degree and a Certificate to qualified students. The goal of the program is to educate students to become paralegals who perform effectively in a variety of legal settings and adapt to changes in the ever-evolving field of law. This program prepares the student for a career as a paralegal working under the supervision of an attorney in either the public or private sector. The Fullerton College Paralegal Studies Program is approved by the American Bar Association (ABA) and does not prepare students for law school or the practice of law. Under California's Business and Professions Code, Section 6450 (et seq.), a paralegal may not market his or her services to the public, but must work under the direct supervision of an attorney licensed to practice law.

The goals of the program are as follows:

- To maintain a program that is dedicated to quality education and occupational competency for the paralegal student in the field of law;
- To ensure that students receive practical instruction and training in the skills necessary to succeed in any legal environment;
- To offer a diverse curriculum that provides a broad understanding of substantive and procedural law, and demonstrates the application of this knowledge in today's legal job market;
- To stress the importance of upholding the general principles of ethics, professional responsibility, and the prohibitions against the unauthorized practice of law;
- To provide the student with the opportunity to apply legal research and analysis principles to diverse factual situations so that they can act on the results as simulated in the legal environment.

Students who wish to transfer course work into the Fullerton College Paralegal Studies Program from another ABA-approved program will be able to transfer in no more than six (6) units of legal specialty classes provided the course is the same as a course offered at Fullerton College and awards exactly the same amount of units. Students who wish to attain an Associate in Science Degree or a Certificate from Fullerton College's Paralegal Studies Program must complete the 24 units of required courses for the major at Fullerton College.

## Faculty

Michael Moore (Program Coordinator)

## Degrees/Certificates

- Paralegal Studies Associate in Science Degree (p. 420)
- Paralegal Studies Certificate (p. 421)

## Courses

### PLEG 090 F Contemporary Issues in the Law 1-3 Units

18 hours lecture and 54 hours lab per term. This course offers timely and contemporary law-related topics designed to enhance job skills, expand the students' knowledge of the legal environment, and increase employment opportunities. Unit credit may range from one to three units in any given semester. Consult the class schedule to verify specific topic area and credit offered in a particular semester. (Degree Credit)

### PLEG 101 F Introduction to Paralegal Studies 3 Units

54 hours lecture per term. This course is a practical introduction for those seeking a career as a paralegal. Topics include an overview of the law and our court system, the fundamentals of legal research and writing, an introduction to the use of computers in a law office, professional ethics, and the role of the paralegal in the modern law office. (CSU) (Degree Credit)

### PLEG 104 F Introduction to Legal Research and Terminology 3 Units

54 hours lecture per term. This course is an introduction to the terminology unique to the practice of law and the legal environment, and to the techniques and procedures utilized in conducting effective legal research. Topics include an overview of the legal system, legal terminology for all major areas of law, understanding the purpose and function of primary and secondary authority, basics of legal research, and techniques for updating the law. (CSU) (Degree Credit)

### PLEG 105 F Introduction to Legal Writing 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F and ENGL 100 F or ENGL 100HF with a grade of C or better  
54 hours lecture per term. 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. (CSU) (Degree Credit)

### PLEG 116 F Computers in the Law Office 3 Units

54 hours lecture and 18 hours lab per term. This course acquaints the student with the computer basics and the popular Microsoft Office Suite in use in legal offices. Students will learn Microsoft Office components including Word, Excel, Access, PowerPoint and Outlook, and the Windows operating system as they are used in the day-to-day life of paralegals. (CSU) (Degree Credit)

### PLEG 201 F Civil Litigation I 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better  
54 hours lecture per term. 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. (CSU) (Degree Credit)

### PLEG 202 F Civil Litigation II 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F and PLEG 201 F with a grade of C or better

54 hours lecture per term. This course continues the study of civil procedures from pretrial through trial, appeals, and collection, emphasizing the drafting of discovery documents. Students gain practical experience in all stages of a civil case. (CSU) (Degree Credit)

### PLEG 203 F Tort Law (formerly Personal Injury) 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better.

54 hours lecture per term. This course will examine those topics that are important in a personal injury practice, including pre-litigation investigation, employment of experts, evaluation of damages, settlements, arbitration, and preparing for trial. All torts including intentional torts, negligence, strict liability, and product liability are covered. (CSU) (Degree Credit)

### PLEG 204 F Family Law 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better

54 hours lecture per term. This course provides an overview of family law practice. Students become familiar with family law forms and the preparation of various family law matters. Topics include the initial client interview, preparing pleadings, child and spousal support, custody and visitation, marital property rights and obligations, trial preparation, enforcement procedures, and post-judgment modifications. (CSU) (Degree Credit)

### PLEG 205 F Probate, Wills and Trusts 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better

54 hours lecture per term. This course provides an overview of estate planning and probate practice. Through drafting simple wills and trusts and by lecture, students will become familiar with the specialized documents and procedures of probate practice. (CSU) (Degree Credit)

### PLEG 206 F Bankruptcy Law and Procedure 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F with a grade of C or better.

54 hours lecture per term. This course provides an overview of bankruptcy law and practice. Students will become familiar with bankruptcy forms and the federal bankruptcy courts. Topics include: the role of the paralegal in bankruptcy, bankruptcy and research, Chapters 7, 11, 12, and 13 of the bankruptcy code, and examining bankruptcy cases. (CSU) (Degree Credit)

### PLEG 207 F Computer-Assisted Legal Research 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better

54 hours lecture per term. This course provides the student with an opportunity to explore and master legal research databases available through on-line and Internet services. In particular, this course will emphasize LEXIS/Westlaw on-line service, Internet accessibility to law libraries, and the use of CD ROM technology in conducting legal research. (CSU) (Degree Credit)

### PLEG 208 F Workers' Compensation Law 3 Units

**Prerequisite(s):** PLEG 101 F and PLEG 104 F, with a grade of C or better

54 hours lecture per term. This course provides an overview of Workers' Compensation practice. Students become familiar with Workers' Compensation forms and the preparation of various Workers' Compensation matters. Topics include a study of the Workers' Compensation system, client interview, initiating benefits to the injured worker, discovery proceedings, vocational rehabilitation, trial preparation, appellate procedure and professional ethics. (CSU) (Degree Credit)

- PLEG 209 F Criminal Law and Procedure** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F, with a grade of C or better  
 54 hours lecture per term. This course provides an overview of criminal law and practice. Students will become familiar with the substantive and procedural aspects of criminal proceedings in both state and federal courts. Topics include: the role of the paralegal in prosecution and defense of criminal defendants, researching and drafting criminal court documents, constitutional ramifications in criminal courts, and sentencing procedures. (CSU) (Degree Credit)
- PLEG 210 F Paralegal Internship** 2-4 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F and PLEG 105 F and PLEG 201 F and PLEG 202 F, with a grade of C or better.  
 18 hours lecture and 60-180 hours of unpaid employment or volunteer work per term in a legal office. Each 60 hours per term of unpaid supervised employment is required for one unit of credit. This course provides vocational learning opportunities for a student through employment in a law office. (CSU) (Degree Credit)
- PLEG 211 F Real Property Law and Procedure** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better  
 54 hours lecture per term. This course provides an overview of the law of real property and practice. Students will become familiar with the substantive and procedural aspects of real property law and the transactional requirements of conveyance. Topics include: the role of the paralegal in real estate practice, the appraisal and financing of real estate; researching and drafting real estate litigation and transactional documents, including but not limited to escrow instructions; sale, purchase and exchange agreements, deeds, deeds of trust, promissory notes, leases, and other instruments. (CSU) (Degree Credit)
- PLEG 212 F Medical Records Review** 2 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better.  
 36 hours lecture per term. This course provides an overview of analyzing medical records. Students will be instructed on how to interpret, analyze, and organize complex information found in medical records. The legal implications of medical records for the medical profession will be analyzed as they relate to litigation. (CSU) (Degree Credit)
- PLEG 213 F Employment and Labor Law** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better  
 54 hours lecture per term. This course provides students with an overview of the legal relationship between employer and employee and a basic understanding of employment and labor related law and its impact on the employer/employee relationship. The student will study both federal and state laws applicable to the employer/employee relationship. Areas covered include the basis for the employer/employee relationship, pre-employment concerns, legal aspects of the employment relationship, discrimination issues, discrimination actions, termination of the employer/employee relationship, the collective bargaining process, employee unions, union certification and de-certification and ethical issues. (CSU) (Degree Credit)
- PLEG 214 F Contract Law and Procedure** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better  
 54 hours lecture per term. This course provides an overview of the law of contracts and contract law practice and procedure. Students will become familiar with the substantive and procedural aspects of the law relating to contracts and the transactional requirements for the creation, administration, modification, and termination of contracts. (CSU) (Degree Credit)
- PLEG 215 F Discovery in Electronic Age** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better  
 54 hours lecture per term. This course provides students with an overview of managing document production and organization during litigation. The student will learn how to handle a client's documents, obtain documents from opposing parties and non-parties, index and organize documents as they are received, utilize computer-assisted litigation support programs and use documents at trial. (CSU) (Degree Credit)
- PLEG 216 F Computers in the Law Office II** 3 Units  
 54 hours lecture per term. This course acquaints the student with the computer basics and application software that is unique to the legal environment and utilized by legal personnel. Students will be exposed to an array of legal software programs that maximizes efficiency in the legal community. Types of programs reviewed include, but are not limited to, programs for document preparation, case management, docketing, retrieval, billing and calendaring system. (CSU) (Degree Credit)
- PLEG 217 F Immigration Law** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better  
 54 hours lecture per term. This course is a practical examination of the immigration and nationality laws of the United States involving a history of immigration migration, the evolution of the country's policies toward aliens and the interplay of the administrative agencies involved in the administration and enforcement of those laws: Justice Department, Labor Department, State Department and Homeland Security. Subjects will include applying for residence and work visas, attaining citizenship, granting of asylum and avoiding deportation and related proceedings. (CSU) (Degree Credit)
- PLEG 218 F Entertainment and Sports Law** 3 Units  
 54 hours lecture per term. This course is a practical examination of the field of entertainment and sports law in the United States. Students will examine these unique industries from a legal standpoint. Emphasis will be placed on understanding the interrelationships among the various occupations inherent in the business of entertainment and sports. Students will be exposed to contracts that govern both industries and will learn how to draft, interpret and litigate those contracts. (CSU) (Degree Credit)
- PLEG 219 F Intellectual Property** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better  
 54 hours lecture per term. This course is a practical examination of the law of intellectual property, namely, trademarks, copyrights, patents and trade secrets. The methods by which each is created, procedures to register or protect each, duration of rights, protection from infringement, and new and international developments for each of these fields of intellectual property is explored. (CSU) (Degree Credit)
- PLEG 220 F Elder Law** 3 Units  
*Prerequisite(s)*: PLEG 101 F and PLEG 104 F with a grade of C or better.  
 54 hours lecture per term. This course examines issues regarding law and procedure for the aging population; financial planning covering advanced directives, wills, power of attorney, trusts; interviewing; patient's rights in healthcare decisions; entitlement programs; managed care; social security and elder abuse. (CSU) (Degree Credit)

**PLEG 221 F Ethics for Paralegals (formerly PLEG 090FF) 2 Units**

36 hours lecture per term. This course is designed to acquaint the student with the rules of professional conduct and ethical requirements for a paralegal in today's legal environment. California State Rules, the A.B.A. Model Rules and Codes, and the N.F.P.A./N.A.L.A. Codes of Ethics will be explored. Students will examine such issues as attorney supervision of paralegals, unauthorized practice of law, confidentiality, conflicts of interest, advertising and solicitation, attorneys' fees and fiduciary duties, competence, malpractice, and ethical conduct issues in litigation. (CSU) (Degree Credit)

**PLEG 223 F Advanced Legal Research and Writing 3 Units**

**Prerequisite(s):** PLEG 101 F and PLEG 104 F and PLEG 105 F with a grade of C or better

54 hours lecture per term. This course is an advanced practical writing skills course. Topics include drafting and generating persuasive documents, specifically motions, writs, and trial/appellate briefs. (CSU) (Degree Credit)

**PLEG 225 F Law Office Management 3 Units**

54 hours lecture per term. This course is an introduction to the role of the paralegal in law office management. Topics include: the managerial challenges in the legal environment; historical development of law firm management; the four principal managerial activities and roles of the office administrator; comprehensive understanding of financial resources, human resources, and supervision unique to the legal environment. (CSU) (Degree Credit)

**PLEG 226 F Constitutional Law 3 Units**

54 hours lecture per term. This course provides an overview of the United States Constitution including a focus on the powers and limitations granted by Articles I, II, III, and the individual rights protected in the Bill of Rights. (CSU) (Degree Credit)

**PLEG 227 F International Law 3 Units**

54 hours lecture per term. This course provides an overview of the sources of public and private international laws. Topics include what constitutes international law: various treaties, the laws and regulations of the European Union, the ICJ and ICC, NAFTA, the role of the United Nations and other current events. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit)

## Paralegal Studies Associate in Science Degree

### Requirements

**PROGRAM CODE:** 2S08434

The **Paralegal Studies Associate in Science Degree** is designed to prepare students for employment in a paraprofessional capacity as an assistant to an attorney in private practice, in a governmental agency, or in private industry. Paralegals may perform many tasks under the supervision of a licensed attorney including preparation of forms and pleadings, interviewing of clients, researching and writing legal documents, managing a law office, and preparing word processing forms and documents. This program is not intended to prepare students for the practice of law. The Paralegal studies program is approved by the American Bar Association (ABA). A grade of C or better is required in each course taken. This program requires completion of its own unique General Education pattern that is ABA approved. This degree requires a total of 27 units.

Code	Title	Units
<b>Required Courses (21 units):</b>		
PLEG 101 F	Introduction to Paralegal Studies	3
PLEG 104 F	Introduction to Legal Research and Terminology	3
PLEG 105 F	Introduction to Legal Writing	3
PLEG 116 F	Computers in the Law Office	3
PLEG 201 F	Civil Litigation I	3
PLEG 202 F	Civil Litigation II	3
PLEG 207 F	Computer-Assisted Legal Research	3
<b>Restricted Electives (6 units):</b>		<b>6</b>
PLEG 090 F	Contemporary Issues in the Law	1-3
PLEG 203 F	Tort Law (formerly Personal Injury)	3
PLEG 204 F	Family Law	3
PLEG 205 F	Probate, Wills and Trusts	3
PLEG 206 F	Bankruptcy Law and Procedure	3
PLEG 208 F	Workers' Compensation Law	3
PLEG 209 F	Criminal Law and Procedure	3
PLEG 210 F	Paralegal Internship	2-4
PLEG 211 F	Real Property Law and Procedure	3
PLEG 213 F	Employment and Labor Law	3
PLEG 214 F	Contract Law and Procedure	3
PLEG 215 F	Discovery in Electronic Age	3
PLEG 216 F	Computers in the Law Office II	3
PLEG 217 F	Immigration Law	3
PLEG 218 F	Entertainment and Sports Law	3
PLEG 219 F	Intellectual Property	3
PLEG 220 F	Elder Law	3
PLEG 221 F	Ethics for Paralegals (formerly PLEG 090FF)	2
PLEG 223 F	Advanced Legal Research and Writing	3
PLEG 225 F	Law Office Management	3
PLEG 226 F	Constitutional Law	3
PLEG 227 F	International Law	3
<b>Total Units</b>		<b>27</b>

### Program Learning Outcomes

**Outcome 1:** Demonstrate ethical requirements required of a paralegal as required by state law and apply rules of professional conduct to resolve any issues.

**Outcome 2:** Research and perform substantive legal work under the direct supervision of an attorney in any legal environment in any state in the United States.

**Outcome 3:** Differentiate and describe the organization and function of the United States' Judicial, Executive and Legislative branches of government.

**Outcome 4:** Demonstrate sensitivity through adaptability and flexibility in working with a diverse group of people from every socioeconomic level.

**Outcome 5:** Use computers and other technology for document production, law office management, trial preparation, and other tasks performed by paralegals.

# Paralegal Studies Certificate

## Requirements

PROGRAM CODE: 2C21275

The **Paralegal Studies Certificate** may be awarded to those students completing the required coursework, and that have an Associate in Science Degree, an Associate of Arts Degree, a Bachelor's or higher degree from a regionally-accredited college or university. All students with an associate degree must have their transcripts evaluated for General Education requirements as listed in the General Education requirements for the Associate in Science degree in Paralegal Studies. The Paralegal Studies Program is approved by the American Bar Association (ABA). An additional 6 units must be chosen from the restricted electives listed below. A grade of C or better is required in each course taken. At least one-half of the units toward the certificate must be completed at Fullerton College. This certificate requires a total of 27 units.

Code	Title	Units
<b>Required Courses (21 units):</b>		
PLEG 101 F	Introduction to Paralegal Studies	3
PLEG 104 F	Introduction to Legal Research and Terminology	3
PLEG 105 F	Introduction to Legal Writing	3
PLEG 116 F	Computers in the Law Office	3
PLEG 201 F	Civil Litigation I	3
PLEG 202 F	Civil Litigation II	3
PLEG 207 F	Computer-Assisted Legal Research	3
<b>Restricted Electives (6 units):</b>		
PLEG 090 F	Contemporary Issues in the Law	1-3
PLEG 203 F	Tort Law (formerly Personal Injury)	3
PLEG 204 F	Family Law	3
PLEG 205 F	Probate, Wills and Trusts	3
PLEG 206 F	Bankruptcy Law and Procedure	3
PLEG 208 F	Workers' Compensation Law	3
PLEG 209 F	Criminal Law and Procedure	3
PLEG 210 F	Paralegal Internship	2-4
PLEG 211 F	Real Property Law and Procedure	3
PLEG 213 F	Employment and Labor Law	3
PLEG 214 F	Contract Law and Procedure	3
PLEG 215 F	Discovery in Electronic Age	3
PLEG 216 F	Computers in the Law Office II	3
PLEG 217 F	Immigration Law	3
PLEG 218 F	Entertainment and Sports Law	3
PLEG 219 F	Intellectual Property	3
PLEG 220 F	Elder Law	3
PLEG 221 F	Ethics for Paralegals (formerly PLEG 090FF)	2
PLEG 223 F	Advanced Legal Research and Writing	3
PLEG 225 F	Law Office Management	3
PLEG 226 F	Constitutional Law	3
PLEG 227 F	International Law	3
<b>Total Units</b>		<b>27</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate ethical requirements required of a paralegal as required by state law and apply rules of professional conduct to resolve any issues.

**Outcome 2:** Research and perform substantive legal work under the direct supervision of an attorney in any legal environment in any state in the United States.

**Outcome 3:** Differentiate and describe the organization and function of the United States' Judicial, Executive and Legislative branches of government.

**Outcome 4:** Demonstrate sensitivity through adaptability and flexibility in working with a diverse group of people from every socioeconomic level.

**Outcome 5:** Use computers and other technology for document production, law office management, trial preparation, and other tasks performed by paralegals.

## Philosophy and Religious Studies

Division: Social Sciences

### Faculty

James Crippen

### Degrees and Certificates

- Philosophy Associate in Arts Degree (p. 423)
- Philosophy Associate in Arts Degree for Transfer (p. 423)
- Religious Studies Associate in Arts Degree (p. 424)

### Courses

**PHIL 100 F Introduction to Philosophy** **3 Units**  
54 hours lecture per term. This course studies various viewpoints, problems, and issues regarding human nature, moral and religious understanding, knowledge of self and the world, and other selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PHIL 100)

**PHIL 100HF Honors Introduction to Philosophy** **3 Units**  
54 hours lecture per term. This Honors-enhanced course studies various viewpoints, problems, and issues regarding human nature, moral and religious understanding, knowledge of self and the world, and other selected topics. This class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course is only offered in the Spring term. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PHIL 100)

**PHIL 101 F Introduction to Religious Studies** **3 Units**  
54 hours lecture per term. This course is an introductory study of religion with emphasis on the origins and functions of religion, religious experience, and religious and theological modes of expression. Course content will be drawn from Eastern and Western traditions, ancient, medieval and modern times. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 105 F World Religions** **3 Units**  
54 hours lecture per term. This course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism, and Buddhism. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 105HF Honors World Religions****3 Units**

54 hours lecture per term. This Honors-enhanced course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism and Buddhism. This course fulfills the Multicultural Education Requirement for graduation. This course is only offered in the Fall term. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 135 F Social and Political Philosophy****3 Units**

54 hours lecture per term. The course is an introduction to social, psychological, and political philosophies, ancient and modern; inquiry into views of human nature, the nature and varieties of social institutions, the personal and social implications of the human experience, and other selected topics. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 160 F Introduction to Ethics****3 Units**

54 hours lecture per term. This course will survey basic ethical theories in modern times in order to show how they have affected analysis of various ethical problems and their solutions both for the individual and societies. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: 120)

**PHIL 170 F Logic and Critical Thinking****3 Units**

54 hours lecture per term. This course focuses on an understanding of the relationship of language to logic, which should lead to the ability to identify and evaluate various inductive and deductive arguments. The course is also concerned that students become aware of semantic confusions and of the nature and importance of definitions. The minimal competence expected of the student is the ability to distinguish fact from judgment, belief from knowledge and skills in inductive and deductive processes, including an understanding of the formal and informal fallacies. The evaluation of an extended argument may be required by the instructor and designed to satisfy the critical thinking requirement for those planning to transfer to the CSU system. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PHIL 110)

**PHIL 172 F Critical Thinking and Writing****3 Units**

**Prerequisite(s):** ENGL 100 F or ENGL 100HF or ENGL 101 C or ESL 110 C with a grade of C or better.

54 hours lecture per term. This course will cover all the standard topics of a traditional critical thinking course: Form vs. Content; Inductive vs. Deductive logic; validity, truth and soundness or good definitions; and the standard formal and informal fallacies as reflected in evaluative writing. Progress toward the refining of various writing skills will be evaluated in the writing and re-writing of the extended argument as well as other areas of the course. This course is specifically designed to meet the IGETC critical thinking/writing requirement. This course fulfills the reading requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 195 F Women's Issues in Philosophy****3 Units**

54 hours lecture per term. This course will look at philosophical issues with which women in philosophy are concerned, such as theoretical accounts of the relations between men and women, theories of knowledge, world views, and the question of social justice. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 200 F Introduction to Christianity****3 Units**

54 hours lecture per term. This course will provide an introduction to the Christian religion, giving attention to the history of its development. Its scriptures, rituals, and beliefs will be examined, as well as important persons, groups, and events which have developed among the Roman, Orthodox, and Protestant communities of Christianity. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 201 F History of Philosophy - Ancient and Medieval****3 Units**

54 hours lecture per term. This course is a historical introduction to the western philosophic tradition. Selected philosophers will be examined from each of the following periods: Ancient Greek and Medieval. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PHIL 130)

**PHIL 202 F History of Philosophy - Modern and Contemporary****3 Units**

54 hours lecture per term. This course is a historical introduction to the western philosophic tradition. Selected philosophers will be examined from each of the following periods: modern and contemporary. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PHIL 140)

**PHIL 210 F Introduction to Judaism****3 Units**

54 hours lecture per term. This course will provide an introduction to the religion of Judaism, with emphasis given to its historical development, scriptures, laws, rituals, customs, and theology. Attention will also be given to the modern developments of Judaism. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 220 F The Holocaust (formerly PHIL 198AF)****3 Units**

54 hours lecture per term. This course will provide a review of the forces which resulted in the Jewish experience known as the Holocaust, the events that transpired during this period, and subsequent Jewish life after the Holocaust. In addition, reflections by both Jews and non-Jews on the Holocaust will be examined, as well as reflections on genocide in general. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 225 F The American Religious Experience****3 Units**

54 hours lecture per term. This course provides an overview of religious life in America, with the emphasis upon how the American cultural experience has shaped the religions of Africa, Europe, and Asia in their American manifestations. Particular focus will be given to religious thinking, ethics, rituals, and institutional forms. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**PHIL 250 F The Religion of Islam****3 Units**

54 hours lecture per term. This course provides an introduction to the study of the religion of Islam, with emphasis upon its history, its main teachings, and its major practices. Topics to be studied include the rise and spread of Islam, scriptures, law, theology and philosophy, mysticism, rituals, and modern developments. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 270 F Introduction to Asian Religions****3 Units**

54 hours lecture per term. This course provides an overview of the variety of religious traditions and communities found throughout Asia. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**PHIL 299 F Philosophy Independent Study****1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

## Philosophy Associate in Arts Degree Requirements

PROGRAM CODE: 2A03868

The **Philosophy Associate in Arts Degree** includes the development of critical thinking and writing skills; the investigation of conceptual problems encountered in the course of reflecting about experience; the assessment of assumptions underlying other sciences and arts; and the exploration of intellectual and cultural history from a broad perspective. Majoring or minoring in philosophy is an excellent way of preparing for law school and other careers that involve facility in reasoning, analysis and information processing. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
PHIL 100 F or PHIL 100HF	Introduction to Philosophy Honors Introduction to Philosophy	3
PHIL 160 F	Introduction to Ethics	3
PHIL 170 F or PHIL 172 F	Logic and Critical Thinking Critical Thinking and Writing	3
PHIL 201 F or PHIL 202 F	History of Philosophy - Ancient and Medieval History of Philosophy - Modern and Contemporary	3
<b>Restricted Electives (6 units):</b>		<b>6</b>
<b>Select any course from the list below, or PHIL 201 F or PHIL 202 F if not already completed from the list above)</b>		
HIST 110 F or HIST 110HF	Western Civilizations to 1550 (formerly Western Civilization I) Honors Western Civilizations to 1550 (formerly Western Civilization II)	3
HIST 111 F or HIST 111HF	Western Civilizations Since 1550 (formerly Western Civilization II) Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	3
PHIL 101 F	Introduction to Religious Studies	3
PHIL 105 F or PHIL 105HF	World Religions Honors World Religions	3
PHIL 135 F	Social and Political Philosophy	3
PHIL 195 F	Women's Issues in Philosophy	3
PHIL 200 F	Introduction to Christianity	3
PHIL 210 F	Introduction to Judaism	3
PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3
PHIL 225 F	The American Religious Experience	3
PHIL 250 F	The Religion of Islam	3
PHIL 270 F	Introduction to Asian Religions	3
PHIL 299 F	Philosophy Independent Study	1
<b>Total Units</b>		<b>18</b>

## Program Learning Outcomes

**Outcome 1:** Identify and explain major philosophical terms and concepts.

**Outcome 2:** Compare and contrast the principles of at least two of the following ethical approaches: Utilitarianism, Kantian ethics, Natural law, Virtue ethics, Feminist ethics.

**Outcome 3:** Evaluate patterns of deductive and inductive reasoning.

**Outcome 4:** Compare and contrast the epistemological and metaphysical systems of Plato, Aristotle, and at least one medieval philosopher.

**Outcome 5:** Compare and contrast the epistemological systems of Rationalism, Empiricism, Kantianism, and at least one 19th century and one contemporary philosopher.

## Philosophy Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A32438

The **Associate in Arts for Transfer Degree in Philosophy**, also called the Philosophy AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in philosophy. Ed Code Section 66746-66749 states, students earning the Philosophy AA-T degree will be granted priority for admission as a Philosophy major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. There are no additional graduation requirements. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better. This degree requires a total of 18 units.

The study of philosophy includes:

1. the development of critical thinking and writing skills;
2. the investigation of conceptual problems encountered in the course of reflecting about experience;
3. the assessment of assumptions underlying other sciences and arts; and,
4. the exploration of intellectual and cultural history from a broad perspective.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (6 units):</b>		
PHIL 100 F	Introduction to Philosophy	3

or PHIL 100HF	Honors Introduction to Philosophy	
or PHIL 160 F	Introduction to Ethics	
PHIL 170 F	Logic and Critical Thinking	3
<b>List A - Select one course from the list below or any required course not already selected from the list above (3 units):</b>		<b>3</b>
PHIL 105 F	World Religions	3
or PHIL 105HF	Honors World Religions	
PHIL 172 F	Critical Thinking and Writing	3
PHIL 201 F	History of Philosophy - Ancient and Medieval	3
PHIL 202 F	History of Philosophy - Modern and Contemporary	3
PHIL 270 F	Introduction to Asian Religions	3
<b>List B - Select two courses from the list below or any List A courses not already selected (6 units):</b>		<b>6</b>
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I)	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)	
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II)	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)	
PHIL 101 F	Introduction to Religious Studies	3
PHIL 135 F	Social and Political Philosophy	3
<b>List C - Select any course listed below or select any course from List A or List B not already selected (3 units):</b>		<b>3</b>
PHIL 195 F	Women's Issues in Philosophy	3
PHIL 200 F	Introduction to Christianity	3
PHIL 210 F	Introduction to Judaism	3
PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3
PHIL 225 F	The American Religious Experience	3
PHIL 250 F	The Religion of Islam	3
<b>Total Units</b>		<b>18</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and explain major philosophical terms and concepts.

**Outcome 2:** Compare and contrast the principles of at least two of the following ethical approaches: Utilitarianism, Kantian ethics, Natural law, Virtue ethics, Feminist Ethics.

**Outcome 3:** Evaluate patterns of deductive and inductive reasoning.

**Outcome 4:** Compare and contrast the philosophical systems of at least two philosophers from each of the ancient, modern, and contemporary eras.

## Religious Studies Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03869

The **Religious Studies Associate of Arts Degree** is designed for those who want a humanities undergraduate background focusing on religion as a preparation for further study in such fields as education, law, social

work, counseling and government service; wish to pursue further studies in religion with the aim of teaching and/or doing research in the subject, or are considering a career in various religious ministries or in religious education. Religious Studies examines Hinduism, Buddhism, Sikhism, Judaism, Christianity, Islam and other less familiar traditions. Studying religious traditions develops habits of mind that are very important for life in our multicultural society. Familiarity with the world's religions is necessary for an understanding of church-state issues in America and of geo-political conflicts in South Asia, the Middle East and elsewhere. This degree requires a total of 18 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
PHIL 101 F	Introduction to Religious Studies	3
PHIL 105 F	World Religions	3
or PHIL 105HF	Honors World Religions	
PHIL 200 F	Introduction to Christianity	3
PHIL 270 F	Introduction to Asian Religions	3
<b>Restricted Electives (6 units):</b>		
ENGL 243 F	Folklore and Mythology	3
or ENGL 243HF	Honors Folklore and Mythology	
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I)	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II)	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)	
HIST 154 F	Ancient Egypt	3
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3
HIST 165 F	Introduction to the Middle East	3
or HIST 165HF	Honors Introduction to the Middle East	
PHIL 100 F	Introduction to Philosophy	3
or PHIL 100HF	Honors Introduction to Philosophy	
PHIL 160 F	Introduction to Ethics	3
PHIL 170 F	Logic and Critical Thinking	3
PHIL 172 F	Critical Thinking and Writing	3
PHIL 195 F	Women's Issues in Philosophy	3
PHIL 201 F	History of Philosophy - Ancient and Medieval	3
PHIL 202 F	History of Philosophy - Modern and Contemporary	3
PHIL 210 F	Introduction to Judaism	3
PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3
PHIL 225 F	The American Religious Experience	3
PHIL 250 F	The Religion of Islam	3
<b>Total Units</b>		<b>18</b>

### Program Student Learning Outcomes

**Outcome 1:** Compare and contrast at least two methods used to study religion.

**Outcome 2:** Compare and contrast at least two of the major religious traditions, focusing on an ethical aspect and on an aspect of worship.



**Outcome 3:** Identify and explain at least two major theological issues dividing Protestantism, Roman Catholicism and Eastern Orthodoxy.

**Outcome 4:** Identify and explain at least two aspects of the world-views held by at least two of the major Asian religious traditions.

## Photography

Division: Technology and Engineering

### Faculty

Melody La Montia  
Jeff Minton

### Degrees and Certificates

- Photography Associate in Arts Degree (p. 426)
- Professional Photography Certificate (p. 427)

### Courses

#### PHOT 101 F Introduction to Photography 3 Units

36 hours lecture and 72 hours lab per term. This course covers the historical, cultural and aesthetic foundations of photography. Students will learn to master their cameras and how to print photographs. (CSU) (UC) (Degree Credit) AA GE, CSU GE

#### PHOT 103 F Intermediate Photography 3 Units

**Advisory:** PHOT 101 F

36 hours lecture and 72 hours lab per term. This course is an introduction to professional photography. Use of 4" x 5" camera, and lab lighting techniques will be emphasized. Students will learn to use the camera and lab lighting to photograph products, people and architectural subjects. Students must provide their own 35mm camera with adjustable aperture, shutter speed and focus. (CSU) (Degree Credit)

#### PHOT 104 F Wedding Photography 3 Units

**Prerequisite(s):** PHOT 101 F or PHOT 111 F or PHOT 112 F, with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course is designed to introduce the student to the aesthetic concepts, basic skills, and techniques used by wedding photographers. Students will acquire hands-on knowledge of photographic applications used in wedding photography. Students must provide their own DSLR cameras with full manual operations and capable of using an external flash. (CSU) (Degree Credit)

#### PHOT 109 F Portrait Photography 3 Units

**Advisory:** PHOT 101 F or PHOT 112 F or demonstrated competency in performing various photographic skills.

36 hours lecture and 72 hours lab per term. This course is designed to give the student a working knowledge of creative and experimental portrait styles and techniques. Students will practice techniques for working with people in a studio situation using "hot lights" and with natural light. Students will have an opportunity to investigate and imitate the styles of well-known portrait photographers. Students must provide their own camera with adjustable light controls and focus. (Degree Credit) (CSU)

#### PHOT 111 F Introduction to Photography from Analog to Digital 3 Units

36 hours lecture and 72 hours lab per term. This course focuses on the cultural significance, historical progression, personal artistic expression, aesthetic experience, and the technical aspects of photography from analog to the emergence of digital photography. The course will include lectures and discussions about conceptual connotation, intellectual response, self-expression, mixed media, and introduces both camera operation and digital imaging techniques. A variety of point and shoot cameras as well as DSLR cameras may be used. (Degree Credit) (CSU) (UC) AA GE, CSU GE

#### PHOT 112 F Introduction to Professional Digital Photography 3 Units

**Prerequisite(s):** PHOT 101 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course covers the historical, cultural, and aesthetic foundations of professional photography. This course develops advanced skills required for professional applications. The student will also explore the emergence and significance of digital technology into photography. Students may use a variety of digital cameras from point to shoot as well as Digital SLR's. (Degree Credit) (CSU)

#### PHOT 114 F Professional Portrait Photography I 3 Units

**Prerequisite(s):** PHOT 111 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course will focus on portrait photography using strobe lighting, posing, digital photography, color imaging, and project workflow. Photographic subjects will include beauty, theatrical, commercial, fashion, family and portrait. Students are required to have a DSLR camera with full manual capabilities including external flash capabilities. (CSU) (Degree Credit)

#### PHOT 118 F 19th Century Photography 3 Units

54 hours lecture per term. This course explores the history and appreciation of photography in the 19th century. Students will examine the relationship between photographic history, culture and art. In addition, this course discusses the significance of historical photography with current photographic trends. (Degree Credit) (CSU)

#### PHOT 119 F 20th and 21st Century Photography 3 Units

54 hours lecture per term. This course explores the history and appreciation of photographs in the 20th and 21st century. Students will examine the relationship between photographic history, culture, and art. In addition, this course discusses the significance of historical photographic images to current trends in photography. (Degree Credit) (CSU)

#### PHOT 196 F Photography Seminar (formerly known as Communications Seminars) 0.5-4 Units

**Advisory:** PHOT 101 F or PHOT 111 F or advanced knowledge in

photography including both digital and analog applications  
0-72 hours lecture and 0-216 hours lab per term. Hours will vary according to the nature of the seminar. This course is designed to expose the students to current equipment, methods, techniques and materials. This course offers the student an opportunity for specialized training in greater depth than can be offered in a general course. This course will vary from semester to semester depending on student interest, new developments in the industry and the need for specialized training. (CSU) (Degree Credit)

#### PHOT 199 F Photography Independent Study 1-3 Units

54-162 hours independent study per term. This course is designed for students who wish to increase their knowledge of photography through individual study. Projects with written reports or outside reading with written reports are required. (Degree Credit) (UC review required)

**PHOT 214 F Professional Portrait II****3 Units****Prerequisite(s):** PHOT 114 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course will emphasize advanced portrait techniques to advance and refine portrait photography skills in preparation for client portfolio. Students will begin to define areas of portrait photography specialization. (CSU) (Degree Credit)

**PHOT 216 F Advanced Digital Photography****3 Units****Prerequisite(s):** PHOT 112 F with a grade of C or better or demonstrate competency in performing various digital photography skills.

36 hours lecture and 72 hours lab per term. This course focuses on creating a final portfolio of work. Students will practice advanced digital photography techniques and explore a variety of photographic subjects relevant for their portfolio. The integration of technical skills and aesthetic expression will be emphasized. Adobe Lightroom and the use of the Wacom tablet will be utilized in this course. Students will explore a variety of subjects possible including portraiture, industrial scientific, landscape, directorial, photojournalism, and fine-art photography that is relevant to their portfolio of work. Students will need a manual digital DSLR. (CSU) (Degree Credit)

**PHOT 217 F Applied Digital Photography****3 Units****Prerequisite(s):** PHOT 216 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course is designed to provide students with the skills to apply advanced digital photography techniques towards a professional portfolio presentation and prepare a strategy for career development. (CSU) (Degree Credit)

**PHOT 221 F Studio Specialties****3 Units****Advisory:** PHOT 111 F or PHOT 112 F or PHOT 216 F with a grade of C or better or demonstrate competency in performing various digital photography functions.

36 hours lecture and 72 hours lab per term. This course focuses on studio practices and lighting techniques. Students will practice studio techniques for a variety of studio photographic subjects that include commercial table top, architectural, publicity, and location shooting. Emphasis will be on the use of strobe lighting, mixed lighting, and special effects. Camera format will be tethered digital view camera system. Students must have a DSLR camera with full manual adjustments and that is capable of using external flash. (CSU) (Degree Credit)

**PHOT 222 F Studio Specialties II****3 Units****Prerequisite(s):** PHOT 221 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course focuses on advanced studio practices and lighting techniques. Students will practice advanced studio techniques specifically geared to personal portfolio work. Camera format will be tethered digital view camera system. Students must have a DSLR camera with full manual adjustments and that is capable of using external flash. (Degree Credit) (CSU)

**PHOT 223 F Creative Photography****3 Units**

54 hours lecture per term. This course explores experimental and technical processes and creative camera operations. Students have the opportunity to explore image making using photography. (Degree Credit) (CSU)

**PHOT 224 F Business Practices for Photography****3 Units**

54 hours lecture per term. This course focuses on business practices for professional photographers including both commercial and fine-art photography. This course will include lectures on business operations, legal responsibilities, branding, contracts, estimates, copyright, project workflows, and business promotion. (Degree Credit) (CSU)

**PHOT 226 F Video Capture for the Still Photographer****3 Units****Prerequisite(s):** PHOT 101 F with a grade of C or better.

36 hours lecture and 72 hours lab per term. This course explores video as a tool in preparing still photographic projects and provides the basic technical skills to capture video content, utilizing a DSLR camera. Develops the skill set to record video in tandem with still photography including photographic and video narrative, still and basic HD video camera techniques, lighting, and basic sound recording. (Degree Credit) (CSU)

**PHOT 227 F Social Media and Still Photography****3 Units**

54 hours lecture per term. This course focuses on the importance of photography in social media. This course will include basic photography, video, lighting, and image editing techniques for social media platforms, including live streaming to create and manage image content. (Degree Credit) (CSU)

**PHOT 290 F Internship in Photography I****2-4 Units**

18 hours lecture per term and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through internships/employment in photography and photography-related industries. Students must have internship or employment in photography or related industry. (CSU) (Degree Credit)

**PHOT 291 F Internship in Photography II****2-4 Units****Prerequisite(s):** PHOT 290 F with a grade of C or better

18 hours lecture and 60-180 hours of supervised unpaid internship or 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

**PHOT 292 F Internship in Photography III****2-4 Units****Prerequisite(s):** PHOT 291 F with a grade of C or better

18 hours lecture and 60-180 hours supervised unpaid internship or 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

**PHOT 293 F Internship in Photography IV****2-4 Units****Prerequisite(s):** PHOT 292 F with a grade of C or better

18 hours lecture and 60-180 hours supervised unpaid internship of 75-225 hours paid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

## Photography Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A19452

The **Photography Associate in Arts Degree** prepares students for transfer to a four year degree program. This degree requires a total of 18 units. The degree provides a sound foundation for students interested in photography and could lead to entry-level employment with photo studios, public relation firms, advertising agencies, service bureaus, print shops, and entertainment industry.

Code	Title	Units
<b>Required Courses (9 units):</b>		
PHOT 101 F	Introduction to Photography	3
PHOT 221 F	Studio Specialties	3
PHOT 290 F	Internship in Photography I <sup>1</sup>	2-4
or PHOT 291 F	Internship in Photography II	
<i>Select one course from the following (3 units):</i>		
PHOT 111 F	Introduction to Photography from Analog to Digital	3
or PHOT 112 F	Introduction to Professional Digital Photography	
<i>Select one course from the following (3 units):</i>		
PHOT 103 F	Intermediate Photography	3
or PHOT 216 F	Advanced Digital Photography	
<i>Select one course from the following (3 units):</i>		
PHOT 109 F	Portrait Photography	3
or PHOT 114 F	Professional Portrait Photography I	
Total Units		18
<b>Total Units</b>		<b>35-37</b>

<sup>1</sup> Must enroll for 3 units in one internship course, or in both internship courses for 2 or more units each to meet requirement.

## Program Student Learning Outcomes

**Outcome 1:** Qualified for entry-level employment and/or transfer to a four year university.

## Professional Photography Certificate

### Requirements

**PROGRAM CODE:** 2C19453A

The **Professional Photography Certificate** is designed to prepare the student for entry-level occupational positions in photo studios, public relation firms, entertainment industry, service bureaus, print shops, and marketing firms. All courses must be completed with a grade of C or better. This certificate requires the completion of 18 units.

Code	Title	Units
<b>Required Courses (9 units):</b>		
PHOT 101 F	Introduction to Photography	3
PHOT 221 F	Studio Specialties	3
PHOT 290 F	Internship in Photography I <sup>1</sup>	2-4
or PHOT 291 F	Internship in Photography II	
<i>Select one course from the following (3 units):</i>		
PHOT 111 F	Introduction to Photography from Analog to Digital	3
or PHOT 112 F	Introduction to Professional Digital Photography	
<i>Select one course from the following (3 units):</i>		
PHOT 103 F	Intermediate Photography	3
or PHOT 216 F	Advanced Digital Photography	
<i>Select one course from the following (3 units):</i>		
PHOT 109 F	Portrait Photography	3
PHOT 114 F	Professional Portrait Photography I	3

PHOT 104 F	Wedding Photography	3
Total Units		18

<sup>1</sup> Must enroll for 3 units in one internship course, or in both internship courses for 2 or more units each to meet requirement.

## Program Student Learning Outcomes

**Outcome 1:** Be able to produce a variety of lighting diagrams necessary to be qualified for entry-level employment.

## Physical Education

**Division:** Physical Education

### Faculty

Crystal Aguirre  
Phillip Austin  
Greg Aviles  
Lisa Bassi  
Chad Baum  
Gina Bevec  
Tim Byrnes  
Garrett Campbell  
Connie Carroll  
Brian Crooks  
Yolanda Duron  
Marcia Foster  
Pamela Lewin  
Alix Plum  
Rhett Price  
Eddie Rapp  
Sean Sheil  
Peter Snyder  
Perry Webster

## Degrees and Certificates

- Athletic Coach Certificate (p. 435)
- Kinesiology Associate in Arts Degree for Transfer (p. 436)
- Personal Trainer Certificate (p. 437)
- Physical Education Associate in Arts Degree (p. 437)
- Physical Education – Fitness Associate in Science Degree (p. 438)
- Pilates Certificate (p. 438)
- Yoga Teacher Skills Certificate (p. 438)

## Courses

**PE 101 F Pickleball** **1 Unit**  
54 hours lab per term. This course provides an overview of the fundamentals for Pickleball. This sport combines the elements of tennis, badminton and table tennis. Topics will include strokes, serve, shot selection and strategies for doubles and singles play. (CSU) (Degree Credit)

- PE 102 F Yoga** **1 Unit**  
54 hours lab per term. This course provides an overview of yoga, an integrated study of health. It involves the practice of breathing techniques, Hatha yoga postures (asanas), meditation, and relaxation. Emphasis is on practicing the principles of pranayama (breathing) and deep relaxation to reduce stress and improve concentration, circulation, and flexibility, and unify body, mind, and spirit. The Hatha yoga portion will also help to tone and strengthen muscles. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 103 F Aikido** **1 Unit**  
54 hours lab per term. This course will introduce Aikido as a relatively modern Japanese martial art based upon nonresistance rather than strength. It is a non-aggressive, non-competitive art based upon a philosophy that stresses harmony with nature and control of body and mind. Comparison and introduction to related forms of throwing arts is included. Self-confidence is enhanced through the study of technique. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 104 F Spinning** **1 Unit**  
54 hours lab per term. This course provides a unique, indoor, group stationary cycling program. This efficient, high-energy group exercise integrates music, camaraderie and visualization in a complete body-mind exercise routine. This philosophy of being mentally and physically fit is the basis of spinning. Spinning emphasizes everyone's individual needs, regardless of athletic ability, taught in a group atmosphere. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 105 F Badminton** **1 Unit**  
54 hours lab per term. This course provides analysis of fundamental strokes with emphasis on court strategy for singles and doubles play. Rules, court etiquette and different types of tournaments will be introduced to the class. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 108 F Bowling** **1 Unit**  
54 hours lab per term. This course is designed to develop sufficient knowledge and skill for successful participation in recreational, league and tournament bowling. Emphasis will be placed on the rules, scoring, etiquette, safety, mechanics, ball dynamics and strategy. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 109 F Intermediate Yoga** **2 Units**  
*Prerequisite(s):* PE 102 F with a grade of C or better  
18 hours and 54 hours lab per term. This course provides breathing practices, meditation techniques, guided relaxation and intermediate yoga sequences. Discussion of yoga philosophy and movement will be based on Hatha yoga traditions. (CSU) (UC) (Degree Credit)
- PE 111 F Off-Season Training - Track and Field (formerly Decathlon)** **2 Units**  
108 hours lab per term. This course provides instruction and participation with advanced skill fundamentals of track and field. The events covered are sprints, horizontal jumps, vertical jumps, shot put, discus, javelin, hammer, distance and middle-distance running. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 112 F Fencing** **1 Unit**  
54 hours lab per term. This course provides instruction in basic fencing movement positions with the weapon, simple and compound actions, defenses, drills, and activity. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 114 F High Intensity Interval Training (formerly Cardiovascular Conditioning)** **1 Unit**  
54 hours lab per term. This course provides a program of personalized exercised designed for the student interested in achieving physical fitness through a program of high intensity interval training. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 115 F Golf** **1 Unit**  
54 hours lab per term. This course has an emphasis on learning the fundamental aspects of golf. There will be instruction in all areas of basic golf, including: rules, etiquette, and swing mechanics. Use of all golf clubs including woods, fairway metals, long irons, and short irons. Emphasis on the "short game" including chipping and putting. Class will be held at an off-campus golf facility. Facility use fee of \$5 is required. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 116 F Off-Season Training - Cross Country** **1-2 Units**  
54-108 hours lab per term. This course provides instruction and participation in training for the intercollegiate cross country team. An emphasis is placed on cardiovascular conditioning, strength training, and flexibility in preparation for competing in long-distance running. (Degree Credit) (CSU) CSU GE
- PE 117 F Gymnastics - Tumbling (formerly Gymnastics)** **1 Unit**  
54 hours lab per term. This course provides the students the opportunity to explore the possibilities of human motion in gymnastic framework. This course is designed to instruct students in a progression motor learning experience. The skill range is from simple to complex tumbling. The course integrates the beginning, intermediate and advanced level gymnastic students together in an educational environment. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 121 F Walking for Fitness** **1 Unit**  
54 hours lab per term. This course will emphasize walking for health and fitness for men and women who are interested in instruction and practice in fitness walking. The class is designed to decrease the risk of coronary heart disorders by increasing heart efficiency, vital lung capacity, and the knowledge of each through aerobic and anaerobic conditioning. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 125 F Aquatic Fitness-Crosstraining** **0.5-2 Units**  
*Advisory:* Swim 50 yards and tread water for 5 minutes.  
4.5-18 hours lecture and 13.5-54 hours lab per term. This course is designed to examine biomechanics and develop cardiovascular fitness and muscle strength through aquatic crosstraining. Students will engage in a variety of strategies that include swim fitness, fitness through paddling, and wave riding. This course includes units on water safety, technique, equipment examination. Participants seeking a crosstraining program may expect to improve their overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 126 F Beach Volleyball** **1 Unit**  
54 hours lab per term. This course provides basic instruction and strategies in beach volleyball. Designed to develop basic skills, knowledge of rules, team strategies and desire for future participation during leisure times. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 127 F Racquetball-Indoors** **1 Unit**  
54 hours lab per term. This course provides the opportunity to learn and improve the essential strokes of racquetball. Emphasis is on skill development, knowledge of rules and basic strategies for singles and doubles play. \$60 Facility use fee required. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

- PE 129 F Cardio Step (formerly Cardio Step Aerobics) 1 Unit**  
54 hours lab per term. This course will provide vigorous aerobic activity through coordinated stepping movements. The class will be held in a musical setting with emphasis on cardiovascular improvements, muscle development, and an increased awareness of body composition. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 134 F Beginning Swimming 1 Unit**  
54 hours lab per term. This course is designed for the beginning and novice swimmer with an emphasis on developing fundamental skills of swimming. All strokes are taught along with elementary diving and basic survival skills. Endurance training and cardiovascular fitness will be discussed. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 137 F Triathlon 1 Unit**  
54 hours lab per term. This course provides cardiovascular fitness training and nutritional program information to compete successfully in a triathlon. This class offers techniques in swimming, biking and running for ultimate performance. Bike rental fee if you do not own your own bicycle. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 139 F Tennis 1 Unit**  
54 hours lab per term. This course offers students the opportunity to learn and improve the essential strokes of tennis. Emphasis is on skill development, knowledge of rules and basic strategies for singles and doubles play. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 141 F Tennis Workshop 0.5-2 Units**  
27-108 hours lab per term. This course is designed for those students desiring intermediate to advanced instruction in tennis. The class gives students the opportunity to put tennis techniques into practice through placement in the various levels of tennis ability. Twenty hours required for each half unit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 144 F Volleyball-Beginning 0.5-1 Units**  
27-54 hours lab per term. This course provides instruction in basic skills, rules and etiquette in the sport of volleyball. Students will experience improvement through supervised instruction and participation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 145 F Volleyball - Intermediate 0.5-1 Units**  
27-54 hours lab per term. This course is designed to provide progressive instruction for intermediate skill development, player positioning in an offensive and defensive system, and team play. Intermediate techniques and strategies are applied. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 148 F Non-Impact Cardiofit (formerly Non-Impact Aerobics) 1 Unit**  
54 hours lab per term. This course consists of group and individual exercise program without jogging, jumping or other jarring movements. Emphasis is on cardiovascular development through static and locomotive movements set to music. This course is designed for first-time individuals of any age, or those medically restricted or with weight-related conditions. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 149 F Swim for Fitness 1 Unit**  
**Advisory:** Ability to swim 50 yards and tread water for one minute  
54 hours lab per term. This course is designed to increase the knowledge of the cardiovascular system through the use of aerobic workouts. Swimming strokes will improve through endurance and repetitive training. Participants seeking a fitness program may expect to improve their overall fitness levels. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 150 F Latin Cardiofit (formerly Latin Aerobic Exercise) 1 Unit**  
54 hours lab per term. This course is designed for a group and individual exercise program. Emphasis in class will be on cardiovascular development through Latin rhythm movements. Activities will include Merengue, Cha-Cha, Cumbia, Reggaeton, and floor exercise in a dance setting to music. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 151 F Water Aerobics/Pool Exercise 1 Unit**  
54 hours lab per term. This course is a fitness and recreational exercise program done in the water. Various water exercise programs are included, such as aerobics to music, flexibility activities, and conditioning activities designed for special needs. (Especially recommended for 40+ individuals and those with handicaps or movement limitations.) (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 152 F Fitness Training Lab-Circuit 1 Unit**  
54 hours lab per term. This course is designed to utilize the equipment and develop a routine with an exercise regimen that will better prepare the student for overall fitness. This course provides students an opportunity to determine their overall fitness level, and improve on areas of need. Letter Grade or Pass/No Pass option. Open Entry/Open Exit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 153 F Strength Training and Conditioning 3 Units**  
162 hours lab per term. This course is designed to allow students to strength train and cardiovascular condition their body. This class enables students to work out with a prescribed individual weight program to improve their overall physical fitness. This class will involve specific resistance exercises and cardiovascular exercises to develop parts of the body used in all types of activities. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 154 F Fitness Testing with Exercise Prescription 3 Units**  
45 hours lecture and 27 hours lab per term. This course will provide students with guidelines for the design of individual exercise programs in the areas of cardiovascular endurance, muscular strength and endurance, flexibility, and weight control. Students will participate in exercise and in the performance of field tests in the areas of aerobic capacity, muscular strength, flexibility, and body composition. Nutritional support for optimizing fitness objectives is utilized during the course. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 158 F Personalized Fitness 1 Unit**  
54 hours lab per term. This course is a supervised, group-circuit exercise program using a variety of exercise equipment that focuses on individual needs which includes the various principles and techniques of exercise as they relate to the older adult. Individual assessments will include review of medical history, resting and exercising heart rate, blood pressure, and body weight. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE
- PE 159 F Strength Training-Olympic Weights 0.5-2 Units**  
18-72 hours lab per term. This course is an open-entry lab experience for those people who want to get maximum physical return for a limited time invested. This course is designed to provide instruction and supervision of students with individualized strength programs using Olympic weights and nautilus apparatus. It is for men and women of all age groups who are interested in muscle toning, muscle rehabilitation, strength increases and body building. Workout times are adjusted to the student's schedule. Letter Grade or Pass/No Pass option. Open Entry/Open Exit. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

**PE 160 F Beginning Basketball (formerly Basketball- Recreational) 1 Unit**

54 hours lab per term. This course provides instruction on the basic concepts, strategy and rules of the game. The course will consist of in-class drills and demonstrations. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

**PE 161 F Body Conditioning and Fitness 1 Unit**

54 hours lab per term. This course will focus on individual exercise for contouring, conditioning, posture, weight training, aerobics and overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 162 F Conditioning for Athletes-Strength 1-2 Units**

54-108 hours lab per term. This course is designed to organize and employ individual conditioning programs for intercollegiate athletes. The program includes analysis and appraisal of strength, cardiovascular, and flexibility of each intercollegiate athlete along with program prescriptions. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

**PE 163 F Kickboxing 1 Unit**

54 hours lab per term. This course provides instruction in kickboxing that stress cardiovascular endurance, strength development, and improved flexibility. The aerobic workout will include influences from several martial arts. For interested students, the sparring and self-defense aspects of kickboxing will be included. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

**PE 165 F Lifetime Fitness 1 Unit**

54 hours lab per term. This course provides cardiovascular fitness training, strength and conditioning exercises and nutrition programs to improve in the components of health related physical fitness. Each student will develop an individual program suited to his/her goals. Lab will cover cardio and strength training exercises, nutritional links, exercise goal setting and adaptation. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

**PE 167 F Cardio Kickboxing (formerly Cardio Kick Boxing Aerobics) 1 Unit**

54 hours lab per term. This course is designed for a group and individual exercise program. Emphasis in class will be on cardiovascular development through basic kickboxing aerobic movements. Activities include stretching, strength training, and basic kickboxing exercise (no physical contact) set to music. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 168 F Cross Fit Training (formerly Boot Camp Workout) 1 Unit**

54 hours lab per term. This course will focus on individual exercises including obstacle course, calisthenics, conditioning, weight training, aerobics, yoga, Pilates, and overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 169 F Advanced Water Polo 1 Unit**

**Advisory:** Ability to swim 100 yards and to tread water for at least 3 minutes.

54 hours lab per term. This course provides instruction in advanced skills, techniques, fundamentals and tactics in the sport of water polo. This course is designed to cover strategies and game-type situations for students with a basic knowledge of the game. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE

**PE 171 F Soccer I (formerly Soccer - Recreational) 1 Unit**

54 hours lab per term. This course provides instruction on the basic skills of soccer: technique, tactics and rules of the game. The workout will be both aerobic and anaerobic. This course will include interclass competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 172 F Competitive Fast Pitch Softball 1 Unit**

**Advisory:** Intermediate skill level in catching, throwing, and hitting. 54 hours lab per term. This course is designed for experienced softball players to give instruction in advanced techniques and game strategies. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 175 F Volleyball - Club 1 Unit**

54 hours lab per term. This course provides the potential intercollegiate player with advanced skill and knowledge in volleyball. Students will receive advance level training in the skills and strategies required with team competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 179 F Intercollegiate Spirit Squad 3 Units**

**Prerequisite(s):** Audition

180 hours lab per term. This course is designed for cheer and dance team members. The focus is on the skills required for a successful spirit squad individual and group. The class will emphasize the fundamentals of lifts, pom-pom and dance technique, choreography, competition, leadership skills, and crowd motivation. Performance at school athletic events and campus functions is mandatory. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 180 F Baseball 1 Unit**

54 hours lab per term. This course has an emphasis on learning the fundamental aspects of baseball. There will be instruction in all areas of baseball, including: hitting, bunting, fielding, throwing, base running, and sliding as well as an emphasis on other offensive and defensive fundamentals such as strategy, positioning and practice organization. This course is designed as an introduction to students who have the desire and ability to perform on the intercollegiate level. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 181 F Intermediate/Advanced Basketball (formerly Basketball) 1 Unit**

54 hours lab per term. This course is designed for students with intermediate to advanced levels of basketball skill and knowledge. Instruction in intermediate to advanced skills of basketball: technique, strategy and rules of the game. This course will consist of in-class competition and aerobic conditioning. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 182 F Body Building and Body Development - Weight Lifting 1 Unit**

54 hours lab per term. This course includes those resistive exercises designed to develop and increase size and strength of muscle tissue with emphasis on safe and proper weight lifting techniques. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 183 F Conditioning for Athletes - Circuit 1-2 Units**

54-108 hours lab per term. This course provides instruction and practice in weight training, weight lifting, anaerobic and aerobic fitness, and flexibility for competition in intercollegiate athletics. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 185 F Football - Defense 3 Units**

162 hours lab per term. This course is designed to give students the proper knowledge and mental preparation necessary to play collegiate football, specifically at the defensive position. Emphasis is placed on acquiring specific position skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Commission on Athletes (COA). (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

- PE 186 F Football - Offense** **3 Units**  
162 hours lab per term. This course is designed to give students the skills, proper knowledge, and mental preparation necessary to play collegiate football, specifically at the offensive position. Emphasis is placed on acquiring specific positions skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Commission on Athletes (COA). (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 187 F Physical Fitness** **1 Unit**  
54 hours lab per term. This course provides students the opportunity to achieve physical fitness through the use of resistance exercises, body-building routines and cardiovascular endurance exercises. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 188 F Self Defense-Boxing** **1 Unit**  
54 hours lab per term. This course is designed to teach the students the fundamentals of boxing and self-defense. Instruction will be based on the rules and regulations of boxing. The students will learn the necessary skills and techniques for participation in amateur boxing. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 189 F Soccer II (formerly Soccer)** **1 Unit**  
54 hours lab per term. This course provides advanced instruction on the following skills of soccer: technique, tactics and rules of the game. The workout will be both aerobic and anaerobic. The course will include interclass competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 191 F Volleyball-Advanced** **0.5-2 Units**  
27-108 hours lab per term. This course is designed for the advanced volleyball athlete with advanced skill and knowledge in the sport of volleyball. Students will receive training in fundamentals and strategies necessary for successful competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 192 F Water Polo** **1 Unit**  
**Prerequisite(s):** Intermediate Swimmer  
Advisory: Ability to swim 50 yards and tread water for three minutes. 54 hours lab per term. This course is designed to provide aquatic game activity for the intermediate and advanced swimmer and to develop a greater understanding of the game of water polo. Instruction will be given in the fundamentals of water polo to include physical skill development, conditioning, game strategy and terminology. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 193 F Weight Training and Weight Lifting** **1 Unit**  
54 hours lab per term. This course provides instruction in strength training and focuses on weight lifting techniques that will produce muscle endurance and muscle strength. This course will provide instruction and demonstration for Olympic style lifts. Students will develop an individual program. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 196 F Swimming - Recreational** **1 Unit**  
54 hours lab per term. This course will provide intermediate instruction and practice in the fundamentals of swimming, including beginning diving and water-safety instruction. This course is designed to develop proficiency in basic strokes to meet prerequisite for advanced Lifesaving and Water-Safety Instruction (WSI) courses. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 199 F Physical Education Independent Study I** **1-2 Units**  
54-108 hours lab per term. In this course, students should choose an interest area and schedule conferences. This class is for students who wish to participate in acceptable non-curricular physical activities or who wish to work in the field as a teaching assistant or official or to study special programs in physical education. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 202 F Intercollegiate Baseball** **3 Units**  
175 hours lab per term. Enrollment subject to audition. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference and the CCCAA. The student athlete will need to pass the sports physical administered by a team physician prior to competition. All practices are included in the scheduled hours of this class. This course is designed for advanced male baseball players wanting to participate on the intercollegiate baseball team. This course is designed to prepare athletes for future participation at the four-year university level. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 203 F Intercollegiate Basketball - Men** **1 Unit**  
**Advisory:** A grade of C or better or a minimum of two years of varsity high school basketball.  
85.5 hours lab per term. This course is designed for advanced male basketball players wanting to participate on the intercollegiate basketball team. Daily practice or play for a minimum 175 lab hours per semester is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the COA and Orange Empire Conference. Student athletes will need to pass the sports physical administered by a team physician prior to competition. The following intercollegiate sports offer credit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 204 F Intercollegiate Basketball - Women** **1 Unit**  
**Prerequisite(s):** A grade of C or better in a minimum of two years of varsity high school basketball.  
85.5 hours lab per term. This course is designed for advanced female basketball players wanting to participate on the intercollegiate basketball team. Daily practice or play for a minimum of ten hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the COA and Orange Empire Conference. Student Athlete will need to pass the sports physical administered by a team physician prior to competition. The following intercollegiate sports offer credit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 205 F Intercollegiate Cross Country - Men and Women** **3 Units**  
**Advisory:** Audition to determine fitness level and running ability (student athletes will need to pass the sports physical administered by a team physician prior to competition) 175 hours lab per term.  
This course provides instructions and training in the exercise techniques and principles required for successful development in cross country distance running and intercollegiate competition. To become eligible for athletic competition, students must meet the eligibility requirements of the CCCAA and the Orange Empire Conference. Daily practice or play for a minimum of ten hours per week. Practice and cross country meets are mandatory. NOTE: PE majors: see counselor for transfer requirements. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 207 F Intercollegiate Football****3 Units****Advisory:** Audition recommended

180 hours lab per term. This course needs to be taken in order for a student athlete to participate in intercollegiate football. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Southern California Football Association and the California Commission on Athletics. This will include daily after-school practice designed to meet the needs of those interested in football. Student must pass a physical. Course may be taken four times for credit. Materials fee of \$200 is payable at registration. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 208 F Intercollegiate Golf - Women****2 Units**

175 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the California Community College Athletic Association (CCCCAA) and Orange Empire Conference (OEC), including pass a physical exam given by the team doctor. Daily practice or play is required. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 209 F Intercollegiate Soccer****3 Units**

175 hours lab per term. This course provides student athletes the opportunity to participate in intercollegiate soccer. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCAA and the Orange Empire Conference. Daily practice or play for a minimum of ten hours per week. The following intercollegiate sport offers credit. Physical Education majors must see counselor for transfer requirements. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 210 F Intercollegiate Softball - Women****3 Units****Advisory:** Subject to audition

180 hours lab per term. This course is designed for advanced female softball players to participate on the intercollegiate softball team. Participation in intercollegiate contests outside of class time is required. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCAA (California Community College Athletic Association) and the Orange Empire Conference (OEC). Student athletes will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 211 F Intercollegiate Swimming (formerly Swimming - Men)****3 Units****Advisory:** Audition.

175 hours lab per term. This course provides daily practice for a minimum of ten hours per week. Team standards and expectations established. This course includes competition versus local college teams. For student eligibility, students must meet the eligibility requirements of the CCAA and the Orange Empire Conference. Student athletes are required to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 214 F Intercollegiate Tennis****3 Units****Advisory:** Audition and pass sports physical administered by a team physician prior to competition

175 hours lab per term. This course is designed for the advanced tennis player wanting to participate on the intercollegiate tennis teams. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team Physician prior to competition. Daily after-school practice or play for a minimum of ten hours per week. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 215 F Intercollegiate Track and Field - Men and Women (formerly Track - Men/Women)****3 Units****Advisory:** Audition (students must pass a sports physical administered by a team physician prior to competition.

180 hours lab per term. This course provides instruction, training and practice in the advanced techniques of track and field. To be eligible, students must meet the eligibility requirements of the CCAA and the Orange Empire Conference. Practice and track and field meets are mandatory. NOTE: Physical Education majors: see counselor for transfer requirements. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 217 F Intercollegiate Sand Volleyball-Women****2 Units****Advisory:** Student needs to be able to perform competitive collegiate-level volleyball skills as assessed by the instructor

180 hours lab per term. This course is designed for advanced sand volleyball players with a strong desire to participate on the intercollegiate sand volleyball team. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 218 F Intercollegiate Volleyball - Women****2 Units****Advisory:** The student needs to be able to perform collegiate level volleyball skills as assessed by the instructor

175 hours lab per term. This course is designed for advanced female volleyball players to participate on the intercollegiate volleyball team. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCAA (California Community College Athletic Association) and the Orange Empire Conference (OEC). Student athletes will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

**PE 219 F Intercollegiate Water Polo****3 Units****Advisory:** Ability to swim 50 yards and tread water for 3 minutes

180 hours lab per term. This course is designed for the competitive student athlete participating in water polo. Course content will include aspects of competitive training such as weight training, repetitive swim sets, offensive and defensive game strategy, and intercollegiate contests. All participants will need to meet eligibility requirements set by the California Community College Athletic Association (CCCCAA). Student athlete will need to pass the sports physical administered by a team physician prior to competition. They will also be governed by their given conference rules and regulations. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 220 F Intercollegiate Lacrosse - Women****3 Units****Advisory:** Tryout.

175 hours lab per term. This course provides opportunities for competitive level lacrosse athletes. Students must meet the eligibility requirements set forth by the CCAA. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) CSU GE

**PE 221 F Intercollegiate Volleyball - Men****2 Units****Advisory:** Perform collegiate level volleyball skills as assessed by the instructor

175 hours lab per term. This course provides advanced male volleyball players the opportunity to participate on the intercollegiate volleyball team. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCAA (California Community College Athletic Association) and the Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit (CSU) (UC) (Degree Credit) CSU GE



- PE 222 F Badminton - Women** 2 Units  
*Advisory:* Audition 180 hours lab per term.  
 For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference and the CCCAA. Also, candidates must pass a physical exam. A tryout is required to demonstrate skills and badminton ability. Daily practices and games per schedule. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)
- PE 223 F Pilates Mat I** 1 Unit  
 54 hours lab per term. This course provides instruction in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The course will include mat work, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE
- PE 224 F Pilates Mat II** 1 Unit  
*Prerequisite(s):* PE 223 F with a grade of C or better  
 54 hours lab per term. This course provides instruction in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. This course will include advanced level mat work using mats, rings, and foam rollers, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE
- PE 225 F Pilates Reformer** 2 Units  
*Prerequisite(s):* PE 223 F with a grade of C or better.  
 Corequisite: PE 226 F with a grade of C or better. 108 hours lab per term. This course covers alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The course will include exercises in mat work and on the reformer, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (Degree Credit) (CSU) CSU GE
- PE 226 F Pilates Apparatus** 2 Units  
*Prerequisite(s):* PE 223 F with a grade of C or better.  
 Corequisite: PE 225 F with a grade of C or better. 108 hours lab per term. This course emphasizes beginning through advanced levels of instruction of exercises and concepts developed by Joseph H. Pilates and incorporating various equipment. This course focuses on exercises for Pilates apparatus, including the Trapeze Table/Cadillac/Tower, Pilates Chair, Step Barrel and Ladder Barrel. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC) CSU GE
- PE 227 F Effective Teaching Methods for Pilates** 2 Units  
*Prerequisite(s):* PE 223 F with a grade of C or better  
 Corequisite: PE 225 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course covers the principles, sequencing, progressions, cues, modifications, muscular integration and appropriate terminology that students need to effectively teach Pilates exercises. (CSU) (Degree Credit)
- PE 228 F Pilates Observation and Evaluation (formerly Pilates Internship)** 2 Units  
*Prerequisite(s):* PE 227 F with a grade of C or better  
 Corequisite: PE 229 F with a grade of C or better. 18 hours lecture and 54-162 hours lab per term. This course gives students the opportunity to assist and teach Pilates on all pieces of equipment, including Mat, Reformer, Cadillac, Chair, Barrel, and Spine Corrector. (CSU) (UC review required) (Degree Credit) CSU GE
- PE 229 F Pilates Clinic** 2 Units  
*Prerequisite(s):* PE 227 F with a grade of C or better.  
*Advisory:* WELL 265 F.  
 Corequisite: PE 228 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course offers students the practical experience of instructing Pilates. This lab experience develops student confidence and professional Pilates training while working with the public under supervision of instructor. (CSU) (Degree Credit) CSU GE
- PE 230 F Yoga Teaching Training Fundamentals** 2 Units  
*Prerequisite(s):* PE 102 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course will teach students the fundamentals of yoga that are essential for both practice and teaching. Students will learn proper body mechanics, alignment principles, and breathing techniques as they relate to the performance and instruction of beginning yoga poses. Topics include the history and philosophy of yoga, Sanskrit terminology, injury prevention, and vocational opportunities. Field trip may be required outside of regular class times. (CSU) (Degree Credit)
- PE 231 F Yoga Teaching Training Development** 2 Units  
*Prerequisite(s):* PE 102 F with a grade of C or better  
 18 hours lecture and 54 hours lab per term. This course provides students with the tools to design and teach a 60-minute yoga class with verbal clarity. This course integrates yogic history and philosophy with Yoga Sutras, body mechanics and alignment, and complementary practices such as breathing styles, flow sequences, and subtle body. Topics include principles of teaching yoga as well as lifestyle choices and ethics for yoga teachers. Field trips may be required outside of regularly-scheduled class times. (CSU) (Degree Credit)
- PE 234 F Yoga Teaching Training Integration** 2 Units  
*Prerequisite(s):* PE 102 F with a grade of C or better.  
 18 hours lecture and 54 hours lab per term. This course provides aspiring yoga teachers with tools to deepen their independent practice in order to strengthen their teaching and develop a personal teaching style. This course continues to focus on designing, integrating, and implementing knowledge and teaching of asanas, pranayama techniques, meditation, and yogic history and philosophy. Students also learn about the business aspects of teaching yoga. Field trips may be required outside of regularly-scheduled class times. (CSU) (Degree Credit)
- PE 235 F First Aid, CPR, and Safety Education** 3 Units  
 54 hours lecture per term. This course clarifies when and how to call for emergency medical help, eliminating the confusion that is frequently a factor in any emergency. This course emphasizes the importance of a safe, healthy lifestyle. The American Red Cross instructional outline will be followed. Students will be certified in both Standard First Aid and CPR. (CSU) (UC) (C-ID: KIN 101)
- PE 236 F Prevention and Care of Athletic Injuries** 3 Units  
 54 hours lecture per term. This course provides basic exposure to the care and prevention of sports-related injuries and illnesses. Discussion includes mechanism of injury, signs and symptoms and the appropriate treatment for the most common injuries. Some class time is spent in the Fullerton College training room learning how to tape ankles and better understand the necessary equipment. (CSU) (UC) (Degree Credit)

**PE 239 F Open Water Scuba Diving****3 Units**

**Advisory:** Ability to swim 50 yards and tread water for 3 minutes  
36 hours lecture and 72 hours lab per term. This is a course designed to prepare the student to perform skills of skin and SCUBA diving. Instruction will identify, discuss, and employ safety techniques in all phases of underwater diving. Confined water training will be practiced in the pool and repeated during open-water (ocean) dive trips. Field trips and boat dives are required for certification, but certification is not required for completion of this course. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 240 F Sports Officiating (formerly Sports Officiating for Men)****3 Units**

54 hours lecture per term. This course covers the basic rules and mechanics of officiating the sports of football, baseball, basketball, softball and soccer. Students will receive practical experience in sports officiating. Students will receive guidance in pursuit of a career in officiating. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 243 F Stress Management****3 Units**

54 hours lecture per term. This course examines productive and non-productive stress and the influence of various types of stress on health and wellness. Topics include the physiological aspects of stress and its effects on health, assessments of personal coping style, strategies for coping effectively with stress, relaxation techniques, mindful awareness, and positive self-talk. Emphasis is placed on practical application of stress management techniques in daily life. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 244 F Techniques and Principles of Coaching****3 Units**

54 hours lecture per term. This course will focus on the factors related to coaching strategies, techniques, principles, and philosophies. Units on nutrition and substance use. ASEP Coaching Certification offered through this course. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 245 F Lifesaving, Basic Rescue and CPR****2 Units**

**Advisory:** Ability to swim.

27 hours lecture and 27 hours lab per term. This course follows the guidelines set by the American Red Cross to teach students to critically analyze the strategies and learn the skills necessary to successfully execute the various first aid and lifesaving rescues for on-land and in-water emergencies. Students will have the opportunity to qualify for lifeguard training, first aid, CPR and AED certifications following the standards set forth by the American Red Cross. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 246 F Advanced/Master SCUBA Diver****3 Units**

**Advisory:** Demonstrate the basic skills of SCUBA according to the national standards of NAUI: Regulator clear, mask clear, low and out of air emergency. Students must be able to swim in order to complete the water component of the course.

Students must be able to swim in order to complete the water component of the course. 36 hours lecture and 72 hours lab per term. This course is an intensive program consisting of lectures and practical application of water skills. The information presented will increase the student's knowledge in the area of equipment, ocean environment, safety, decompression, leadership and specialty diving options. This course provides the opportunity to receive certification not only for Advanced and/or Master, but also for specialties such as Rescue, Deep Water, Night, and Decompression diving, etc. NAUI standards and certification will be utilized. Field trips may be required outside of regularly-scheduled class time. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 247 F Sports Management****3 Units**

54 hours lecture per term. This course introduces organization, management, planning, staffing, directing, and controlling a sports program. The course also includes such areas as budget, facilities, scheduling, officials, transportation, public relations, parent and booster clubs, purchase and care of athletic equipment, fundraising, and marketing. (CSU) (Degree Credit) AA GE, CSU GE

**PE 248 F Psychology of Sport****3 Units**

54 hours lecture per term. This course will assist students to understand the effects of psychological factors on motor performance. In addition, students will gain an understanding of the effects of participating in physical activity on psychological development, health, and well-being. (CSU) (Degree Credit) CSU GE

**PE 250 F Sports and Society****3 Units**

54 hours lecture per term. This course examines the role of sport in modern society; looks at how sport influences and shapes global attitudes among nations; and investigates the historical, social, economic and political impact of sport on society. This course fulfills Multicultural Education Requirement for graduation. (CSU) (Degree Credit) CSU GE

**PE 252 F Introduction to Kinesiology****3 Units**

54 hours lecture per term. This course is an introduction to kinesiology as a profession and as an academic discipline. This course explores sub-disciplines, opportunities in the field, philosophy, scientific foundation, and analyzes and evaluates individuals that have influenced these trends and issues in the 21st century. (Degree Credit) (CSU) (C-ID: KIN 100)

**PE 254 F Personal Fitness Trainer****3 Units**

54 hours lecture per term. 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 and Conditioning Association (NSCA) and the National Academy of Sports Medicine (NASM). Topic areas include exercise sciences, nutrition, exercise techniques in resistance, cardiovascular, and flexibility training, consultation and evaluation of new clients, program design for physical training, clients with unique needs, and safety and legal issues with personal training. (CSU) (Degree Credit) CSU GE

**PE 266 F Fitness for Living (formerly Physical Fitness as a Lifelong Concept)****3 Units**

54 hours lecture per term. This course provides the student an opportunity to survey and analyze the exercise components that make up our individual physical beings. Students will appraise the concepts of behavior that may result in an optimally fit and healthy life-style. Additionally, students will observe the effects that age has on specific body systems and how a reasonably conceived and defined program of activity and diet may result in improved fitness, wellness and quality of life with advancing years. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

**PE 270 F Exercise Nutrition****3 Units**

54 hours lecture per term. This course provides scientific information for sport nutrition that covers the principles, background and rationale for current nutrition guidelines for athletes. The goal is to learn to combine good nutritional habits along with a quality exercise regime to meet weight control goals. This course will emphasize caloric planning, energy expenditure, metabolism, and eating disorders. Diet theories will be explained along with the evaluation of fad diets and supplements. (CSU) (Degree Credit)

**PE 280 F Theory of Coaching Baseball (formerly Professional Activities: Theory of Baseball) 3 Units**

**Advisory:** Student must display skill ability comparable to college level baseball

54 hours lecture and 18 hours lab per term. This course is designed to prepare future physical education teachers or community youth coaches in the theory of coaching baseball. This course will include the mental and physical preparation of becoming a complete baseball player, theory and practical experience of offensive and defensive phases of the game of baseball, the individual technique drills for each of the nine positions; coach and umpire relationships; the planning and execution of practice sessions; and the strategies involved during a game. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 281 F Professional Activities: Theory of Basketball 2 Units**

18 hours lecture and 36 hours lab per term. The course deals with basketball from beginning to present day. The psychology of coaching basketball, player fundamentals, administration of a total basketball program, behavioral objectives for basketball, practical experience of teaching offense and defense will be covered. (CSU) (UC Credit Limitation) (Degree Credit)

**PE 282 F Theory of Coaching Softball 2 Units**

18 hours lecture and 54 hours lab per term. This course is designed to give students the skills, proper knowledge, and mental preparation necessary to play or coach collegiate softball. Emphasis is placed on acquiring specific positions skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Community College Athletic Association (CCCAA). (CSU) (UC Credit Limitation) (Degree Credit)

**PE 283 F Theory of Coaching Football (formerly Professional Activities/ Theory of Football) 3 Units**

54 hours lecture per term. This course is designed for student going into physical education, coaching or recreation with basic fundamentals, strategy and history of football. Students will gain an awareness of techniques and concepts relating to better performance and learning experiences. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 284 F Theory of Coaching Soccer 2 Units**

36 hours lecture per term. This course provides preparation for future physical education and recreation teachers or community coaches in the theory of coaching soccer. It includes the mental and physical preparation of becoming an instructor of, or participant in, the sport of soccer and the theory and practical experience of offensive and defensive phases of the game. Technique, tactics, fitness, and psychology will be covered in detail. Rules and regulations of the game, along with equipment and safety, will be discussed. (CSU) (UC Credit Limitation) (Degree Credit)

**PE 285 F Theory of Coaching Volleyball (formerly Professional Activities - Theory of Volleyball) 3 Units**

54 hours lecture per term. This course provides the history of volleyball to present day, the theory of coaching strategy, player fundamentals, and program implementation and administration. Behavioral objectives for volleyball, practical experience of teaching offense and defensive systems will be covered. Field trips may be required outside of regularly-scheduled class. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

**PE 296 F Off Season Athletes - Softball 0.5-3 Units**

27-162 hours lab per term. This course is designed to give students the specific preparation necessary to play college softball. It will include position specific training and advanced strategies within a team environment. The students will be instructed on charting using technology to determine individual and team tendencies. Try-outs will be conducted for the purposes of assigning positions. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## Athletic Coach Certificate

### Requirements

**PROGRAM CODE:** 2C10616A

The **Athletic Coach Certificate** is designed to educate and prepare students to become certified athletic coaches in the recreational and competitive sports industry. Upon successful completion, students will earn a certificate and be more qualified to coach inter-scholastically and within sport organizations and private business. A minimum grade of C is required in each course taken. This certificate requires a total of 12-15 units, with at least 1 unit coming from the Restricted Elective list.

Code	Title	Units
<b>Required Courses (11-12 units):</b>		
PE 240 F	Sports Officiating (formerly Sports Officiating for Men)	3
PE 244 F	Techniques and Principles of Coaching	3
PE 247 F	Sports Management	3
PE 245 F	Lifesaving, Basic Rescue and CPR	2-3
or PE 235 F	First Aid, CPR, and Safety Education	
<i>NOTE FOR PE 235 F and PE 245 F: American Red Cross certification can be substituted at the discretion of the Division. Students must take an additional 2-3 units from Restricted Electives.</i>		
<b>Restricted Electives - Select at least one course from the list below (1-3 units)</b>		<b>1-3</b>
PE 105 F	Badminton	1
PE 112 F	Fencing	1
PE 115 F	Golf	1
PE 117 F	Gymnastics - Tumbling (formerly Gymnastics)	1
PE 126 F	Beach Volleyball	1
PE 127 F	Racquetball-Indoors	1
PE 134 F	Beginning Swimming	1
PE 139 F	Tennis	1
PE 144 F	Volleyball-Beginning	0.5-1
PE 145 F	Volleyball - Intermediate	0.5-1
PE 154 F	Fitness Testing with Exercise Prescription	3
PE 180 F	Baseball	1
PE 181 F	Intermediate/Advanced Basketball (formerly Basketball)	1
PE 185 F	Football - Defense	3
PE 189 F	Soccer II (formerly Soccer)	1
PE 202 F	Intercollegiate Baseball	3
PE 203 F	Intercollegiate Basketball - Men	1
PE 204 F	Intercollegiate Basketball - Women	1

PE 205 F	Intercollegiate Cross Country - Men and Women	3
PE 207 F	Intercollegiate Football	3
PE 208 F	Intercollegiate Golf - Women	2
PE 209 F	Intercollegiate Soccer	3
PE 210 F	Intercollegiate Softball - Women	3
PE 211 F	Intercollegiate Swimming (formerly Swimming - Men)	3
PE 214 F	Intercollegiate Tennis	3
PE 215 F	Intercollegiate Track and Field - Men and Women (formerly Track - Men/Women)	3
PE 217 F	Intercollegiate Sand Volleyball-Women	2
PE 218 F	Intercollegiate Volleyball - Women	2
PE 219 F	Intercollegiate Water Polo	3
PE 250 F	Sports and Society	3
PE 252 F	Introduction to Kinesiology	3
PE 270 F	Exercise Nutrition	3
PE 281 F	Professional Activities: Theory of Basketball	2
PE 282 F	Theory of Coaching Softball	2
PE 283 F	Theory of Coaching Football (formerly Professional Activities/Theory of Football)	3
PE 284 F	Theory of Coaching Soccer	2
PE 285 F	Theory of Coaching Volleyball (formerly Professional Activities - Theory of Volleyball)	3

**Total Units** **12-15**

## Program Student Learning Outcomes

**Outcome 1:** Formulate a full season plan of practice for the students in their respective sport.

**Outcome 2:** Interpret the rules and regulations of three sports of the student's choice.

## Kinesiology Associate in Arts Degree for Transfer

### Requirements

**PROGRAM CODE:** 2A36863

The **Associate in Arts in Kinesiology for Transfer** (AA-T), also called the Kinesiology AA-T Degree, prepares students to transfer to CSU campuses that offer a bachelor's degree in Kinesiology. Ed Code Section 66746-66749 states students earning the Kinesiology AA-T degree will be granted priority for admission as a Kinesiology major to a local CSU, as determined by the CSU campus to which the student applies. Students with a degree in Kinesiology may pursue careers in a variety of health science professions including physical training, physical therapy, fitness instruction, coaching and athletics. The completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work.

The Kinesiology AA-T Degree requires a total of 21-24 units in required courses and restricted electives from the categories below as indicated.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (15 units):</b>		
ANAT 231 F	General Human Anatomy	4
ANAT 240 F	Human Physiology	5
PE 252 F	Introduction to Kinesiology	3
<b>Movement Based Courses - Select a maximum of one (1) course from any three (3) of the following areas for a minimum of three units: Aquatics, Combatives, Dance, Fitness, Individual Sports or Team Sports:</b>		<b>3</b>
<b>Aquatics</b>		
PE 134 F	Beginning Swimming	1
PE 149 F	Swim for Fitness	1
PE 151 F	Water Aerobics/Pool Exercise	1
PE 192 F	Water Polo	1
<b>Combatives</b>		
PE 103 F	Aikido	1
PE 112 F	Fencing	1
PE 163 F	Kickboxing	1
PE 188 F	Self Defense-Boxing	1
<b>Dance</b>		
DANC 111 F	Jazz I	1
DANC 113 F	Tap Dance I	1
DANC 114 F	Tap Dance II	1
DANC 115 F	Hip Hop Dance I	1
DANC 116 F	Social Dance	1
DANC 140 F	Introduction to Ballet	2
DANC 141 F	Ballet I - Beginning Ballet	2
DANC 142 F	Ballet II - Advanced Beginning Ballet	2
DANC 143 F	Ballet III - Intermediate Ballet	2
DANC 160 F	Introduction to Modern Dance	2
DANC 161 F	Beginning Modern Dance (formerly DANC 107 F)	2
DANC 162 F	Advanced Beginning Modern Dance (formerly DANC 108 F)	2
DANC 163 F	Intermediate Modern Dance	2
<b>Fitness</b>		

PE 102 F	Yoga	1
PE 104 F	Spinning	1
PE 114 F	High Intensity Interval Training (formerly Cardiovascular Conditioning)	1
PE 121 F	Walking for Fitness	1
PE 129 F	Cardio Step (formerly Cardio Step Aerobics)	1
PE 165 F	Lifetime Fitness	1
PE 167 F	Cardio Kickboxing (formerly Cardio Kick Boxing Aerobics)	1
PE 182 F	Body Building and Body Development - Weight Lifting	1
PE 193 F	Weight Training and Weight Lifting	1
<b>Individual Sports</b>		
PE 105 F	Badminton	1
PE 115 F	Golf	1
PE 117 F	Gymnastics - Tumbling (formerly Gymnastics)	1
PE 127 F	Racquetball-Indoors	1
PE 139 F	Tennis	1
<b>Team Sports</b>		
PE 181 F	Intermediate/Advanced Basketball (formerly Basketball)	1
PE 189 F	Soccer II (formerly Soccer)	1
PE 203 F	Intercollegiate Basketball - Men	1
PE 204 F	Intercollegiate Basketball - Women	1
<b>Restricted Electives - Select courses from the following (6-9 units):</b>		
BIOL 102 F & BIOL 102LF	Human Biology and Human Biology Laboratory	4
CHEM 101 F	Chemistry for Allied Health Science	5
or CHEM 111AF	General Chemistry I	
MATH 120 F	Introductory Probability and Statistics	4
or PSY 161 F	Elementary Statistics for Behavioral Science	
or SOSC 120 F	Introduction to Probability and Statistics	
PHYS 205 F	Physics for the Life Sciences I	4
or PHYS 210 F	Physics with Calculus for the Life Sciences I	
PE 235 F	First Aid, CPR, and Safety Education	3
<b>Total Units</b>		<b>21-24</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding the relation of the kinesiology and physiology of the anatomy as it relates to movement.

## Personal Trainer Certificate

### Requirements

**PROGRAM CODE:** 2C10617A

The **Personal Trainer Certificate** is designed to prepare students to enter the job market as a certified personal trainer. This certificate requires a total of 19 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (19 units):</b>		
ANAT 231 F	General Human Anatomy	4

or		
BIOL 102 F & BIOL 102LF	Human Biology and Human Biology Laboratory	4
NUTR 210 F	Human Nutrition	3
or PE 270 F	Exercise Nutrition	
PE 154 F	Fitness Testing with Exercise Prescription	3
PE 235 F	First Aid, CPR, and Safety Education	3
PE 254 F	Personal Fitness Trainer	3
WELL 265 F	Movement Anatomy (formerly titled Kinesiology)	3
<b>Total Units</b>		<b>19</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate the information, training and practical skills to qualify for work as a Personal Trainer.

**Outcome 2:** Design appropriate exercise programming as measured by ability to following guidelines and recommendation for scientific exercise programming during internship.

## Physical Education Associate in Arts Degree

### Requirements

**PROGRAM CODE:** 2A17369

The **Physical Education Associate in Arts Degree** is designed for students who will transfer to a four-year institution, obtaining a bachelor's degree through a California State University program. Course and degree requirements vary at respective universities. It is important to consult with a Fullerton College Counselor and respective university transfer representatives to confer program requirements and transferable work. The Program requires a total of 18-20 units of which 16-17 units are in required courses. An additional 2-3 units must be chosen from the restricted units listed below.

Code	Title	Units
<b>Required Courses (16-17 units):</b>		
PE 235 F	First Aid, CPR, and Safety Education <sup>1</sup>	3
PE 236 F	Prevention and Care of Athletic Injuries	3
PE 248 F	Psychology of Sport	3
PE 252 F	Introduction to Kinesiology	3
ANAT 231 F	General Human Anatomy	4-5
or ANAT 240 F	Human Physiology	
<b>Restricted Electives</b>		
Activity Courses (2-3 units)		2-3
<b>Total Units</b>		<b>18-20</b>

<sup>1</sup> American Red Cross certification can be substituted at the discretion of the Division. Students must take an additional 3 units from restricted electives.

## Program Student Learning Outcomes

**Outcome 1:** Identify concepts and theories of sport exercise psychology that can be applied, in coaching and teaching.

**Outcome 2:** Identify and apply four related fields of Physical Education: Fitness/Wellness, Teaching/Coaching, Sport Careers, Sport/Exercise.

**Outcome 3:** Identify athletic injuries and demonstrate a physical remedy for each.

## Physical Education – Fitness Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03832

The **Physical Education – Fitness Associate in Science Degree** is designed to educate students that are entering into the fitness industry or those that are interested in coaching, exercise training and fitness training. This degree requires a total of 18-20 units.

Code	Title	Units
<b>Required Courses (13 units):</b>		
ANAT 231 F	General Human Anatomy	4
or		
BIOL 102 F & BIOL 102LF	Human Biology and Human Biology Laboratory	4
PE 154 F	Fitness Testing with Exercise Prescription	3
PE 235 F	First Aid, CPR, and Safety Education <sup>1</sup>	3
PE 248 F	Psychology of Sport	3
(An American Red Cross certification can be substituted at the discretion of the Division. Students must take an additional 3 units from restricted electives.)		
<b>Restricted Electives (5-7 units):</b>		<b>5-7</b>
ACCT 001 F	Accounting for Small Business	3
FOOD 060 F		2
PE 150 F	Latin Cardiofit (formerly Latin Aerobic Exercise)	1
PE 182 F	Body Building and Body Development - Weight Lifting	1
PE 236 F	Prevention and Care of Athletic Injuries	3
WELL 230 F	The Body-Mind Connection	3
<b>Total Units</b>		<b>18-20</b>

### Program Student Learning Outcomes

**Outcome 1:** Design their own exercise program.

**Outcome 2:** Identify athletic injuries and demonstrate the physical remedy for each.

**Outcome 3:** Demonstrate a working knowledge of how the body's metabolism is affected by muscle, cardio respiratory, and functional exercise on the body.

## Pilates Certificate

### Requirements

PROGRAM CODE: 2C31128A

The **Pilates Certificate** is designed to educate and prepare students to become Certificated Pilates Instructors in the health and wellness industry. Upon successful completion, students will earn a certificate and

be qualified to teach mat work and exercises utilizing Pilates equipment, including Reformer, Cadillac, Spine Corrector and Chair at facilities which offer Pilates. Students must present current CPR and First Aid cards to receive certificate. This certificate requires a total of 18 units.

Code	Title	Units
<b>Required Courses (18 units):</b>		
PE 223 F	Pilates Mat I	1
PE 224 F	Pilates Mat II	1
PE 225 F	Pilates Reformer	2
PE 226 F	Pilates Apparatus	2
PE 227 F	Effective Teaching Methods for Pilates	2
PE 228 F	Pilates Observation and Evaluation (formerly Pilates Internship)	2
PE 229 F	Pilates Clinic	2
PE 236 F	Prevention and Care of Athletic Injuries	3
WELL 265 F	Movement Anatomy (formerly titled Kinesiology)	3
<b>Total Units</b>		<b>18</b>

### Student Program Learning Outcomes

**Outcome 1:** Identify, explain and differentiate between Pilates and Movement Principles, major musculature and core muscles.

**Outcome 2:** Identify and break down safe practices that relate to Pilates exercises.

**Outcome 3:** Conduct interviews and make assessments with clients, determining appropriate exercises to prescribe.

## Yoga Teacher Skills Certificate

Division: Physical Education

### Requirements

PROGRAM CODE: 2C00090A

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **Yoga Teacher Skills Certificate** prepares students to meet the requirements for Yoga Alliance to become a 200-hour Registered Yoga Teacher (RYT) with Yoga Alliance. This comprehensive and wisdom-based program uses anatomy and physiology as well as English and Sanskrit terminology to provide students with both a broad background and practical experience in the essential elements of yoga. Completion of the program prepares students for employment in health clubs, spas, yoga studios, hospitals, and the health industry as well as for self-employment as yoga instructors. This certificate requires 9 units.

Code	Title	Units
<b>Required Courses (9 units):</b>		
PE 102 F	Yoga	1
PE 109 F	Intermediate Yoga	2
PE 230 F	Yoga Teaching Training Fundamentals	2
PE 231 F	Yoga Teaching Training Development	2
PE 234 F	Yoga Teaching Training Integration	2
<b>Total Units</b>		<b>9</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and determine safe practices related to yoga postures.

**Outcome 2:** Demonstrate, describe and teach basic hatha yoga postures, breathing techniques and meditation.

**Outcome 3:** Identify and describe anatomy and kinesiology principles in relation to basic hatha yoga postures.

## Physics

Division: Natural Sciences

### Faculty

Lilliana Barabas

Seung Ji

Dr. Christopher Persichilli

Peter Widmann

### Degrees and Certificates

- Physics Associate in Science Degree for Transfer (p. 440)

### Courses

#### PHYS 120 F Relativity for Poets 3 Units

**Prerequisite(s):** MATH 040 F or MATH 041 F or MATH 043 F, with a grade of "C" or better or math skills clearance.

54 hours lecture per term. This course is intended for non-science students seeking general education credit in a physical science course without a lab. It presents Einstein's bizarre universe, from black holes to the Big Bang. Relativity's role in everyday life is discussed, including GPS and the magnet stuck to your fridge. Emphasis is placed on concepts rather than manipulating equations. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

#### PHYS 130 F Elementary Physics 4 Units

**Prerequisite(s):** MATH 020 F with a grade of C or better or math skills clearance

54 hours lecture and 54 hours lab per term. This course is a survey of some of the more important principles, philosophy, and phenomena of physics. Topics include mechanics, electricity and magnetism, wave phenomena, and modern physics. The course is intended for those with no previous experience in physics. It is not open to anyone who has taken a college-level physics course. The laboratory includes experiments in measurement, mechanics, electricity, wave phenomena, and radioactivity. (Degree Credit) (CSU) (UC Credit Limitation; no credit if taken after PHYS 205 F, PHYS 210 F or PHYS 221 F.) AA GE, CSU GE, IGETC (C-ID: PHYS 140)

#### PHYS 205 F Physics for the Life Sciences I 4 Units

**Prerequisite(s):** MATH 141 F or MATH 141HF and MATH 142 F, with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers Newtonian mechanics, conservation laws, heat, and waves. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the first half of an algebra-based two-semester sequence (PHYS 205 F and 206 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the CSU system, but not the UC system. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 105)

#### PHYS 206 F Physics for the Life Sciences II 4 Units

**Prerequisite(s):** PHYS 205 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers electricity and magnetism, optics, special relativity, and quantum physics. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the second half of an algebra-based two-semester sequence (PHYS 205 F and 206 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the CSU system, but not the UC system. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 110)

#### PHYS 210 F Physics with Calculus for the Life Sciences I 4 Units

**Corequisite(s):** MATH 151 F or MATH 151HF with a grade of C or better.

54 hours lecture and 54 hours lab per term. This course covers Newtonian mechanics, conservation laws, heat, and waves. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the first half of a calculus-based two-semester sequence (PHYS 210 F and 211 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the UC system; the CSU system will accept either this sequence or PHYS 205 F and PHYS 206 F. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 105)

#### PHYS 211 F Physics with Calculus for the Life Sciences II 4 Units

**Prerequisite(s):** PHYS 210 F with a grade of C or better

Corequisite: MATH 152 F or MATH 152HF with a grade of C or better. 54 hours lecture and 54 hours lab per term. This course covers electricity and magnetism, optics, special relativity, and quantum physics. The laboratory portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the second half of a calculus-based two-semester sequence (PHYS 210 F and 211 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the UC system; the CSU system will accept either this sequence or PHYS 205 F and 206 F. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 110)

#### PHYS 221 F General Physics I 4 Units

**Prerequisite(s):** MATH 151 F or MATH 151HF with a grade of C or better or a grade of Pass in math skills clearance

Corequisite: MATH 152 F or MATH 152HF, with a grade of C or better. 54 hours lecture and 54 hours lab per term. This course covers mechanics, vibrations, properties of matter. The laboratory provides students with hands-on experience working with the subject material. Required for majors in physics and engineering. Recommended for majors in all the other physical sciences. PHYS 221 F, 222 F, and 223 F are a calculus-based, three-semester survey of introductory physics. High school physics or PHYS 130 F is strongly recommended, and students must complete one semester of calculus before beginning the sequence. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 205)

#### PHYS 222 F General Physics II 4 Units

**Prerequisite(s):** PHYS 221 F and MATH 152 F or MATH 152HF with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers electrostatics, electric and magnetic fields, simple DC and AC circuits, and Maxwell's equations in integral form. The laboratory provides students with hands-on experience working with the subject material. Required for majors in physics and engineering. Recommended for majors in all the other physical sciences. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 210)

**PHYS 223 F General Physics III****4 Units****Prerequisite(s):** PHYS 222 F with a grade of C or better

54 hours lecture and 54 hours lab per term. This course covers the topics of thermodynamics, mechanical and electromagnetic waves, geometrical and physical optics, special relativity, and an introduction to quantum mechanics including wave-particle duality, the uncertainty principle, the atom, and the nucleus. The laboratory provides students with hands-on experience working with the subject material. PHYS 221 F, 222 F, and 223 F are a calculus-based three-semester survey of introductory physics. Required of majors in physics and most majors in engineering. Recommended for majors in all the other physical sciences. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE, IGETC (C-ID: PHYS 215)

## Physics Associate in Science Degree for Transfer

### Requirements

PROGRAM CODE: 2S36982

The **Physics Associate in Science Degree for Transfer**, also called the Physics AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in physics. Ed Code Section 66746-66749 states students earning the Physics AS-T Degree will be granted priority for admission as a physics major to a local CSU, as determined by the CSU campus to which the student applies. The main purpose of a Physics AS-T is to provide the lower-division coursework needed in order to continue in a bachelor's-degree program; however, the Physics AS-T also provides valuable quantitative and problem-solving skills that are in demand by employers hiring, e.g., lab technicians, or in a variety of fields such as manufacturing and education. Of people who obtain a terminal bachelor's degree in physics, about half work in industry, in fields such as aerospace, military, software, and electronics. Most of the other half work either as high school teachers or as lab technicians at universities or government-funded laboratories. PhD's in physics are qualified for teaching at the university level and for scientific research, as well as for higher-level jobs in the same areas as those with bachelor's degrees.

The Physics AS-T Degree requires a total of 24 units of required courses as indicated below. The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Courses (24 units):</b>		<b>24</b>
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
MATH 151 F	Calculus I (formerly MATH 150AF) or MATH 151HF Honors Calculus I (formerly MATH 150HF)	4
MATH 152 F	Calculus II (formerly MATH 150BF) or MATH 152HF Honors Calculus II	4
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
<b>Total Units</b>		<b>24</b>

### Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore topics in physics.

**Outcome 2:** Demonstrate the ability to apply physics concepts to solve problems.

## Political Science

Division: Social Sciences

### Faculty

Jodi Balma  
Naji Dahi  
Joseph Reilly

### Degrees and Certificates

- Political Science Associate in Arts Degree (p. 442)
- Political Science Associate in Arts Degree for Transfer (p. 442)

### Courses

**POSC 100 F American Government****3 Units**

54 hours lecture per term. This course is an introduction to American government that involves learning about its institutions, i.e., the Congress, the Presidency, the Judiciary, the interaction among the federal, state, and local governments. The role of political parties, elections, public bureaucracies, interest groups and other complimentary elements that interact/effect the political system. Students will develop the necessary skills for analyzing and critically appraising such areas as competing theories, the historical evolution of the Republic and its Constitution. (Degree Credit) (CSU) (UC) AA, GE, CSU GE, IGETC (C-ID: POLS 110)

**POSC 100HF Honors American Government****3 Units**

54 hours lecture per term. This Honors-enhanced course is an introduction to American government that involves learning about its institutions, i.e., the Congress, the Presidency, the Judiciary, the interaction among the federal, state, and local governments, the role of political parties, elections, public bureaucracies, interest groups and other complimentary elements that interact/effect the political system. Students will develop the necessary skills for analyzing and critically appraising such areas as competing theories, the historical evolution of the Republic and its Constitution. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 110)



- POSC 110 F Contemporary American Politics** **3 Units**  
54 hours lecture per term. This course emphasizes the political problems that are current in the American political scene and provides an opportunity for the student to investigate and evaluate contending response to those problems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- POSC 110HF Honors Contemporary American Politics** **3 Units**  
54 hours lecture per term. This Honors-enhanced course emphasizes the political problems that are current in the American political scene and provides an opportunity for the student to investigate and evaluate contending response to those problems. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- POSC 120 F Introduction to Political Theory** **3 Units**  
54 hours lecture per term. The course is a survey of Western political theory. It is intended to introduce students to political theory from Greek times to the Enlightenment and beyond. It is intended to show students how political theory shapes current institutions and ideologies in the United States, Europe, and other countries around the world. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 120)
- POSC 150 F California Government and Politics** **3 Units**  
54 hours lecture per term. This course is an introduction to the study of state and local politics, exploring the political culture, processes, behavior, institutions, public policy, and distribution of power in California. Policies in other states are examined to aid understanding of California politics. Topics include the political culture of the state, the process of change, policy agendas, budgeting, and the current status of states within the federal system. (Degree Credit) (CSU) AA GE, CSU GE
- POSC 180 F Capital Field Trip: Sacramento Seminar** **3 Units**  
54 hours lecture per term. This seminar course joins with student delegations from other California colleges and universities that meet in the state capitol for a policy conference each spring. Includes presentations and panel discussions by legislators, lobbyists, public administrators, and journalists. This course will meet regularly before the practicum to prepare students for the conference and an independent research paper will be assigned. This course includes a mandatory three-day field trip to Sacramento's Legislative Seminar. (Degree Credit) (CSU)
- POSC 180HF Honors Capital Field Trip - Sacramento Seminar** **3 Units**  
54 hours lecture per term. This Honors-enhanced course enables students to join with student delegations from other California colleges and universities that meet in the state capitol for a policy conference each Spring. Includes presentations and panel discussions by legislators, lobbyists, public administrators, and journalists. This class will meet regularly before the practicum to prepare students for the conference and an independent research paper will be assigned. This course includes a mandatory three-day field trip to Sacramento's Legislative Seminar. (Degree Credit) (CSU)
- POSC 198 F Political Campaign Internship** **1 Unit**  
60 hours unpaid internship or 75 hours paid internship per term. This course allows students to increase their knowledge of political science through campaign work for a candidate for elected office. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)
- POSC 199 F Public Policy Internship** **1 Unit**  
60 hours unpaid internship or 75 hours paid internship per term. This course allows students to increase their knowledge of public policy through an internship with an elected official, government office, or non-profit agency. (Degree Credit) (CSU) (UC Credit Limitation depending upon course content) (UC review required)
- POSC 200 F Introduction to the Study of Politics** **3 Units**  
54 hours lecture per term. This course is an introduction to the study of politics in general, not simply American politics. Explores the many faces of politics all over the world, examining its relationship to morality, culture, economics, justice and international affairs both theoretically and practically. As an introductory course, it includes elements from the major sub-disciplines of political science, i.e., American politics, comparative politics, and international relations. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 150)
- POSC 215 F Comparative Politics** **3 Units**  
54 hours lecture per term. This course emphasizes various methodologies necessary to compare political systems representing Eurasia, the Western Hemisphere, and the developing nations. It explores the differences and similarities in the operation of the major branches of government, political party and electoral systems, types and activities of interest groups, individual rights and liberties, leadership patterns, the power relations among local, provincial, national and supra-national regional governments such as the European Community, and the challenges facing transitional democracies throughout the world. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 130)
- POSC 216 F Government and Politics of the Middle East** **3 Units**  
54 hours lecture per term. This course is an introduction to the historical, social, economic and ideological foundations of the Middle East in general and major states in the region in particular. Emphasis is placed on the political and economic developments in Egypt, Iraq, Iran, Israel and Saudi Arabia. Topics covered include: introduction to the land, peoples, cultures and religions; colonialism and the emergence of modern states following World War I; Western influence and Islamic revivalism; regional conflicts (Arab-Israeli, Iran-Iraq, Gulf War); the politics and economics of oil; U.S. based ethnic interest groups and their influence on U.S. foreign policy; patrimonialism and militarism; liberalization and democratization. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- POSC 220 F Introduction to Public Administration** **3 Units**  
54 hours lecture per term. This course covers the role of government in American society, the historic development of the public service, management issues related to modern governmental enterprises, problems of personnel, public budgeting and alternative strategies for securing administrative responsibility. This course focuses on readings and cases pertaining to local and state administration, although issues involving the federal level are discussed where appropriate. This course examines, from a multidisciplinary perspective, those essential competencies, values and issues important to public service organizations and the importance of public policy at the local, state, national and international levels. Field trips may be required outside of regularly-scheduled class time. (Degree Credit) (CSU) (UC) CSU GE, AA GE
- POSC 230 F Introduction to International Relations** **3 Units**  
54 hours lecture per term. This course is a study in the evolution of the international system, focusing on theories of international relations and globalization, and the role of the state, transnational corporations, and non-governmental/inter-governmental organizations. Special emphasis is given to the rise of globalization, economic and cultural interdependence, the role of international law, North-South relations, and the challenge of dealing with environmental/ecological destruction in a world dominated by states in the post Cold War era. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: POLS 140)

**POSC 250 F Gender and Politics****3 Units**

54 hours lecture per term. This course is an introduction to the study of global politics at the national, state, and local levels with an emphasis on the role of gender, including an examination of politics and the intersection of gender, race, class, and ethnicity. Contemporary political analysis will focus on issues such as equal pay, sex discrimination in education and the workplace, affirmative action, reproductive rights, sexual choice, domestic violence, and increasing the representation of members of underrepresented groups in political arenas. This course fulfills the Multicultural Education requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**POSC 275 F Introduction to Public Law****3 Units**

54 hours lecture per term. This course explores the interactive dynamic among the judicial, legislative, and executive branches in the creation and implementation of public law. It involves an extensive analysis of cases relating to the separation of powers, federal-state relations, and rights of property, free expression, privacy, criminal due process, political participation, and equality under the law. Corollary topics include orientation to legal research, case briefing, development of judicial review, judicial organization and decision-making, sources and limits of judicial power, and the political impact of Supreme Court decisions. Students will participate in various simulations of court decisions. (Degree Credit) (CSU) (UC) AA GE, CSU GE

**POSC 299 F Political Science Independent Study****1 Unit**

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of political science through individual study and small group conferences. Students successfully completing this course will be awarded elective credit in the Social Science area. (Degree Credit) (CSU) (UC review required)

or POSC 180HF	Honors Capital Field Trip - Sacramento Seminar	
POSC 198 F	Political Campaign Internship	1
POSC 199 F	Public Policy Internship	1
POSC 216 F	Government and Politics of the Middle East	3
POSC 220 F	Introduction to Public Administration	3
POSC 275 F	Introduction to Public Law	3
POSC 299 F	Political Science Independent Study	1

**Total Units****18-19****Program Student Learning Outcomes**

**Outcome 1:** Describe the major theories and philosophical principles that were applied to establish the American political system, e.g., federalism, confederation, and states' rights.

**Outcome 2:** Identify some of the theories and philosophical principles that were used to establish political systems, i.e., liberalism, conservatism, fascism, communism.

**Outcome 3:** Differentiate among the different forms of government, i.e., parliamentary, federalism, one-party rule.

**Outcome 4:** Identify some of the critical periods in the evolution of international relations. Such theories and concepts will also include "balance-of-power," "bipolar versus multipolar world," and the "realist school" versus the "idealist school."

**Political Science Associate in Arts Degree****Requirements****PROGRAM CODE:** 2A03885

The **Political Science Associate in Arts Degree** is designed to prepare students to acquire basic historical, constitutional, theoretical, governmental knowledge and academic skills both to transfer to a four year institution and to understand the causes of past and present social and political events. This degree requires a total of 18 - 19 units.

Code	Title	Units
<b>Required Courses (3 units):</b>		
POSC 100 F	American Government	3
or POSC 100HF	Honors American Government	
<b>List A: Select three courses from the following (9-10 units):</b>		<b>9-10</b>
POSC 120 F	Introduction to Political Theory	3
POSC 200 F	Introduction to the Study of Politics	3
POSC 215 F	Comparative Politics	3
POSC 230 F	Introduction to International Relations	3
SOSC 120 F	Introduction to Probability and Statistics	4
<b>List B: Select from the following (6 units):</b>		<b>6</b>
POSC 110 F	Contemporary American Politics	3
or POSC 110HF	Honors Contemporary American Politics	
POSC 150 F	California Government and Politics	3
POSC 180 F	Capital Field Trip: Sacramento Seminar	3

**Political Science Associate in Arts Degree for Transfer****Requirements****PROGRAM CODE:** 2A31523

The **Associate in Arts Degree in Political Science for Transfer**, also called the Political Science AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Political Science. Ed Code Section 66746-66749 states students earning the Political Science AA-T degree will be granted priority admission as a political science major to a local CSU, as determined by the CSU campus to which the student applies. Political Science is the scientific study of government. As such, it encompasses a wide range of interdisciplinary subjects, including economics, history, law, and philosophy. One major concern of political science is educating each generation to how democracy works, what are its benefits relative to other governmental systems. Lacking such knowledge can threaten our very existence since democracy is dependent upon a well-informed and civic-minded citizenry. This degree is an excellent general preparation for careers in conflict resolution, criminal justice, diplomacy, education, elections, journalism, the practice of law, public administration and public policy, public service, and research.

The Political Science AA-T Degree requires a total of 18-19 units of required courses and restricted electives. A grade of C or better is required in all courses. The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary

that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).

- b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core (3 units):</b>		
POSC 100 F	American Government	3
	or POSC 100HF Honors American Government	3
<b>List A (9-10 units) - select three:</b>		
POSC 120 F	Introduction to Political Theory	3
POSC 200 F	Introduction to the Study of Politics	3
POSC 215 F	Comparative Politics	3
POSC 230 F	Introduction to International Relations	3
SOSC 120 F	Introduction to Probability and Statistics	4
<b>List B (6 units) - select two:</b>		
POSC 110 F	Contemporary American Politics	3
	or POSC 110HF Honors Contemporary American Politics	3
POSC 150 F	California Government and Politics	3
POSC 216 F	Government and Politics of the Middle East	3
POSC 275 F	Introduction to Public Law	3
<b>Total Units</b>		<b>18-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Describe the major theories and philosophical principles that were applied to establish the American political system, e.g., federalism, confederation, and states' rights.

**Outcome 2:** Identify some of the theories and philosophical principles that were used to establish political systems, i.e., liberalism, conservatism, fascism, communism.

**Outcome 3:** Differentiate among the different forms of government, i.e., parliamentary, federalism, one-party rule.

**Outcome 4:** Identify some of the critical periods in the evolution of international relations. Such theories and concepts will also include "balance-of-power," "bipolar versus multi-polar world," and the "realist school" versus the "idealist school."

## Pre-Nursing

### Degrees/Certificates

- Pre-Nursing Associate in Arts Degree (p. 443)

## Pre-Nursing Associate in Arts Degree Requirements

PROGRAM CODE: 2A18800

The **Pre-Nursing Associate in Arts Degree** is designed to give students the necessary background needed to enter the field of nursing. This degree prepares students for further study toward an Associate's or Bachelor's Degree in Nursing. A total of 18-19 units are required from the course list below.

Code	Title	Units
<b>Required Courses (18-19 units):</b>		
ANAT 231 F	General Human Anatomy	4
ANAT 240 F	Human Physiology	5
CHEM 101 F	Chemistry for Allied Health Science	5
MICR 220 F	Medical Microbiology	4-5
	or MICR 262 F General Microbiology	
<b>Total Units</b>		<b>18-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of how the scientific method is used to explore anatomy, physiology, and microbiology.

**Outcome 2:** Demonstrate safe and proficient use of laboratory equipment and techniques including microscopes, dissection, aseptic handling of microorganisms, basic biochemical testing protocols, etc.

**Outcome 3:** Distinguish between normal and pathological phenomena.

## Printing Technology

Division: Technology and Engineering

### Faculty

Benjamin Cuatt

### Degrees and Certificates

- Advanced Sheetfed Offset Presswork Certificate (p. 446)
- Digital/In-Plant Graphics Certificate (p. 446)
- Electronic Imaging Certificate (p. 446)
- Flexography Skills Certificate (p. 447)
- Printing Technology (General) Certificate (p. 447)
- Printing Technology Associate in Science Degree (p. 447)
- Quick Print/In-Plant Graphics Certificate (p. 448)
- Screen Printing Certificate (p. 448)

### Courses

**PRNT 030 F Introductory Printing Skills Lab** 0.5-6 Units

**Prerequisite(s):** PRNT 101 F with a grade of C or better.

27-324 hours lab per term. This advanced course will provide students with an opportunity to practice various printing skills that have developed from completing other printing courses. Students can improve skills in the operation of digital printing equipment, electronic pre-press, large offset press operation, small offset press operation, flexographic press operation, bindery operations, paper specifications, and machine maintenance. (Degree Credit)

- PRNT 031 F Offset Skills Lab** **0.5-6 Units**  
27-324 hours lab per term. This course provides students with the opportunity to practice offset lithographic printing skills through further usage of printing equipment. Use of small and large offset presses, electronic pre-press and computer-to-plate systems can be practiced. (Degree Credit)
- PRNT 032 F Flexographic Printing Skills Lab (formerly PRNT 090 F)** **0.5-6 Units**  
*Advisory:* Completion of or current enrollment in a flexographic or introduction to printing course.  
27-324 hours lab per term. This course provides students with the opportunity to practice flexographic printing skills through further usage of Esko Automation Engine software, CTP (Computer to Plate) hardware and software, plate mounting and flexographic printing equipment. (Degree Credit)
- PRNT 033 F Digital Printing Skills Lab** **0.5-6 Units**  
*Prerequisite(s):* PRNT 060 F or PRNT 075 F, with a grade of C or better  
27-324 hours lab per term. This course provides students with the opportunity to practice offset digital printing skills through further usage of printing equipment. (Degree Credit)
- PRNT 034 F Prepress Skills Lab** **0.5-6 Units**  
*Prerequisite(s):* PRNT 075 F with a grade of C or better  
27-324 hours lab per term. This course provides students with the opportunity to practice prepress skills through further usage of prepress equipment. (Degree Credit)
- PRNT 035 F Screen Printing Skills Lab** **0.5-6 Units**  
*Advisory:* Ability to safely operate silk screen printing equipment.  
27-324 hours lab per term. This advanced course will provide students with an opportunity to practice silk screen printing skills that have developed from completing other printing courses. (Degree Credit)
- PRNT 044 F Self-Publishing Techniques for Sequential Art** **3 Units**  
This course introduces students to publishing techniques for sequential art including comics, graphic novels, and children's books. Students learn to produce their work both with the professional equipment, as well as how to successfully publish with limited printing capabilities.
- PRNT 050 F Screen Printing I (formerly PRNT 072AF)** **2 Units**  
18 hours lecture and 54 hours lab per term. This is a basic course which introduces the principle, basic methods and techniques of preparing designs and placing stencils on a screen printing frame. Topics include establish register systems and printing on various substrates as per industrial procedures, care, use and safety precautions in operating and cleaning of the screen printing frames, equipment and supplies. (Degree Credit)
- PRNT 051 F Screen Printing II (formerly PRNT 072BF)** **2 Units**  
*Prerequisite(s):* PRNT 050 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This is an intermediate course which covers vocational copy preparation techniques or multi-color reproduction, register and color matching. Instruction includes ink composition, modifiers and proper ink for production. Emphasis is on new inks and curing procedures (Degree Credit)
- PRNT 052 F Screen Printing III (formerly PRNT 072CF)** **2 Units**  
*Prerequisite(s):* PRNT 051 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This course prepares students to print multi-color projects with tight register printing on various substrates. Topics also include heat transfer and gray scale printing. (Degree Credit)
- PRNT 060 F Basic Digital Printing (formerly PRNT 070 F)** **2 Units**  
18 hours lecture and 54 hours lab per term. This course introduces students to the field of digital imaging using desktop publishing software and digital presses, as well as finishing equipment. This course includes instruction in page layout and design using various computer applications including InDesign, Illustrator, and Photoshop. Computerized pre-press instruction includes preflighting of files and imposition. This course also includes instruction on the operation of digital RIP systems and bindery, preparing the student for more advanced digital imaging classes, as well as occupational skills necessary in in-plant graphics and printing today. (Degree Credit)
- PRNT 061 F Intermediate Digital Imaging (formerly PRNT 070 F)** **2 Units**  
*Prerequisite(s):* PRNT 06 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This is an intermediate course which covers the technical aspects of digital image layout and digital presswork and intermediate design theory. This course is designed for those entering the printing field and are interested in training for digital press operation. Course content includes the application of knowledge and performance of pressroom safety, digital marking systems, electronic prepress, graphic layout for print application, press maintenance techniques, and an exposure to intermediate production techniques. (Degree Credit)
- PRNT 062 F Advanced Digital Imaging (formerly PRNT 070 F)** **2 Units**  
*Prerequisite(s):* PRNT 061 F with a grade of C or better  
18 hours lecture and 54 hours lab per term. This advanced course covers the technical aspects of digital image layout, digital presswork and advanced design theory. This course is designed for those entering the printing field and are interested in training for digital press operation. Course content includes the application of knowledge and performance of pressroom safety, digital marketing systems, electronic prepress, graphic layout for print application, press maintenance techniques, and an exposure to advanced production techniques. (Degree Credit)
- PRNT 075 F Electronic Prepress I** **6 Units**  
*Advisory:* PRNT 101 F.  
72 hours lecture and 144 hours lab per term. This course has pre-flighting, export of files, imposition, file formats, and computer-to-plate imaging for sheet fed offset presswork. This course presents the theory of color and how it applies to the lithographic process and digital imaging. Typesetting, proof reading and image manipulation via digital files, to merge copy and graphics, is an integral part of this course. Design and creativity is not the intent of this course. Curriculum includes the Printing Industries of America Prepress Skills Training Program. Software applications including Adobe Creative Suites (Acrobat, InDesign, Bridge, Photoshop and Illustrator), Rampage RIP, Preps imposition, XMPie variable data, and Suitcase Fusion will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress). (Degree Credit)
- PRNT 077 F Advanced Electronic Prepress** **6 Units**  
*Advisory:* PRNT 075 F  
72 hours lecture and 144 hours lab per term. This course presents the advanced theory of color management and how it applies to the lithographic process and digital imaging. This course has instruction in electronic page layout, preflighting, exporting of files, imposition, file formats, and plate imaging for sheetfed offset press. Curriculum includes the Printing Industries of America Prepress Skills Training Program Tasks 4, 5, and 6. Software application including Adobe Creative Suites (Acrobat, InDesign, Photoshop, and Illustrator), Rampage RIP, Preps imposition, Fiery Color Profiler Suite, and XMPie variable data will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress.) (Degree Credit)

- PRNT 085 F Introduction to Flexography** 4 Units  
54 hours lecture and 54 hours lab per term. This introductory course will provide the student with a technical understanding of flexographic press operation for one, two and three color printing. Students will practice the set-up, operation, and clean-up of a narrow web flexographic press. Topics for discussion will include history of flexography, flexographic plates, plate mounting, ink systems and nomenclature, types of cylinders, substrates, die cutting, stripping, slitting, environmental concerns, and related safety. (Degree Credit)
- PRNT 086 F Advanced Flexography** 4 Units  
*Advisory:* PRNT 085 F  
54 hours lecture and 54 hours lab per term. This advanced course will provide the student with advanced technical aspects of flexographic press operation for multiple color printing. Students will practice pre-press techniques and develop advanced flexographic press skills on a narrow web label press. Advanced applications of flexographic processes, design, multi-color prints, plate materials, bar codes, inks, substrates, presses and press equipment, pressroom practices, environmental concerns, and related safety will be discussed. (Degree Credit)
- PRNT 090 F Printing Skills Lab** 0.5-6 Units  
*Advisory:* Any printing technology class except screen printing classes.  
Open Entry/Open Exit 27-324 hours lab per term. This advanced course will provide students with an opportunity to practice various printing skills that have developed from completing other printing courses. Students can improve skills in the operation of digital printing equipment, electronic pre-press, large offset press operation, small offset press operation, flexographic press operation, bindery operations, paper specifications, and machine maintenance. (Degree Credit)
- PRNT 091 F Advanced Topics in Printing** 0.5-6 Units  
27-324 hours lab per term. This course will provide the student the opportunity to study new and emerging skills and field of studies in the printing industry. This course will be offered in modules for advanced topics. Unit credit may range from .5-3 units per module. Consult class schedule to verify specific topic area and credit offered in a particular module. (Degree Credit)
- PRNT 101 F Introduction to Printing** 3 Units  
36 hours lecture and 72 hours lab per term. This is a basic course which covers the technical aspects of the various printing processes and related areas. This course includes instruction in page layout and design using various computer applications including InDesign, Illustrator and Photoshop. Computerized pre-press instruction includes preflighting of files and output on computer-to-plate systems. This course also includes basic instruction in small offset press, flexography, screen printing, digital printing and prepares the student to enter other more advanced printing classes. (CSU) (Degree Credit)
- PRNT 133 F Packaging Production** 3 Units  
*Advisory:* Working knowledge of Illustration software  
36 hours lecture and 72 hours lab per term. This course introduces students to the process and technical aspects of designing and creating custom packaging. This course includes instruction in packaging layout and design using various computer applications including InDesign, Illustrator, and Photoshop, as well as in computer-aided drafting software such as Esko's Artios CAD. Course also includes instruction in large format printing and prototype die cutting on a plotting table. (CSU) (Degree Credit)
- PRNT 140 F Color Management** 3 Units  
*Advisory:* PRNT 101 F  
36 hours lecture and 72 hours lab per term. This course explores Color Management using G7 Process Control to standardize workflow processes and achieve consistent color reproduction, reduce costs and expand efficiencies in a print environment. This course addresses the challenges of managing color across devices and workflows, defining how to integrate and maintain proven industry practices and standards. This course is workflow training from the creative process through final print output. (CSU) (Degree Credit)
- PRNT 142 F Prepress for Print using Adobe Creative Suite** 3 Units  
*Advisory:* PRNT 101 F  
36 hours lecture and 72 hours lab per term. This course is prepress workflow training using Adobe InDesign, Illustrator, Photoshop and Acrobat. Students learn proper file creation and the preflight of client-supplied files through final print output. This course teaches the basics of font management, color spaces, image correction, resolution, discovery of errors through preflight, file repair, proofing, and final output. Design is not the intent of this course. (CSU) (Degree Credit)
- PRNT 145 F Variable Data Imaging** 3 Units  
*Advisory:* PRNT 075 F and PRNT 101 F  
36 hours lecture and 72 hours lab per term. This course provides students with exposure to the concepts of variable data printing using XMPie software. Students will explore one-to-one marketing concepts, cross media platforms and how variable data effects these markets. (CSU) (Degree Credit)
- PRNT 152 F Introduction to Electronic Prepress** 4 Units  
*Advisory:* PRNT 101 F  
54 hours lecture and 54 hours lab per term. This course covers the technical aspects of electronic prepress. The use of both Macs and PC based computers, using current software in page layout, scanning, design, typography, file management for printers will be taught. This class is part of the new industrial image skills training program. (CSU) (Degree Credit)
- PRNT 171 F Offset Presswork** 6 Units  
*Advisory:* PRNT 101 F or one year industrial experience or two semesters of articulated high school graphics.  
72 hours lecture and 126 hours lab per term. This is a basic course which introduces the technical aspects of lithographic sheet-fed offset presswork for those seeking initial employment in the printing industry. The basic lithographic theory and its application to knowledge and performance of pressroom safety, the feeder, register, pre-production and an exposure to production techniques. (PIA Certification) (CSU) (Degree Credit)
- PRNT 172 F Intermediate Offset Presswork** 6 Units  
*Prerequisite(s):* PRNT 171 F with a grade of C or better.  
72 hours lecture and 126 hours lab per term. This intermediate course covers the technical aspects of lithographic, sheeted offset presswork and intermediate lithographic theory. This course is designed for those entering the printing field and are interested in training for large press operation. Course content includes the application to knowledge and performance of pressroom safety, the cylinder system, inking and dampening systems, press make-ready procedures, multicolor printing, press maintenance techniques, and an exposure to intermediate production techniques. Emphasis is on completion of the knowledge certificate by passing the GATF/PIA-SC, Fullerton College examination. This is the completion of the Sheeted Offset Press Certification initiated in the PRNT 171 F prerequisite. (Graphic Arts Technical Foundation - GATF -Certification) (CSU) (Degree Credit)

**PRNT 973 F Advanced Offset Presswork****6 Units****Prerequisite(s):** PRNT 172 F with a grade of C or better.

72 hours lecture and 126 hours lab per term. This is an advanced course designed for students entering the printing field seeking employment. This printing production course covers the intricate reproduction of process lithographic color. The advanced application of press performance, pressroom safety, press feeder systems, the printing units, the inking and dampening systems, four color register, make-ready and advanced production techniques. Emphasis is on completion of the Performance Certificate by passing the GATF/PIA-SC, Fullerton College four color process practical examination and gaining employment. (PIA Certification) (CSU) (Degree Credit)

## Advanced Sheetfed Offset Presswork Certificate

### Requirements

**PROGRAM CODE:** 2C10619A

The Advanced Sheetfed Offset Presswork Certificate Program provides students with the skills needed to operate large offset presses and enter the commercial printing industry. The Advanced Sheetfed Offset Presswork Certificate requires completion of 24-29 units. A grade of C or better is required in each course

Code	Title	Units
<b>Required Courses (12 units):</b>		
PRNT 171 F	Offset Presswork	6
PRNT 172 F	Intermediate Offset Presswork	6
<b>Restricted Electives (12-17 units):</b>		
PRNT 060 F	Basic Digital Printing (formerly PRNT 070 F)	2
PRNT 075 F	Electronic Prepress I	6
PRNT 101 F	Introduction to Printing	3
PRNT 133 F	Packaging Production	3
PRNT 140 F	Color Management	3
PRNT 142 F	Prepress for Print using Adobe Creative Suite	3
PRNT 973 F	Advanced Offset Presswork	6
<b>Total Units</b>		<b>24-29</b>

### Program Student Learning Outcomes

**Outcome 1:** Print a single color printed sample, determining proper corrective actions to produce a sample free of printing defects using the offset printing press.

**Outcome 2:** Determine proper paper selection for a process printing sample.

## Digital/In-Plant Graphics Certificate

### Requirements

**PROGRAM CODE:** 2C10620A

The **Digital/In-Plant Graphics Certificate (formerly Quick Print/In-Plant Graphics Certificate)** is designed to provide students with the skills and knowledge necessary to operate a digital press and an offset duplicator, and the skills needed for employment in the commercial printing field. This

certificate requires a total of 26-31 units. A grade of C or better is required in each course.

Code	Title	Units
<b>Required Courses (12 units):</b>		
PRNT 060 F	Basic Digital Printing (formerly PRNT 070 F)	2
PRNT 061 F	Intermediate Digital Imaging (formerly PRNT 070 F)	2
PRNT 062 F	Advanced Digital Imaging (formerly PRNT 070 F)	2
PRNT 101 F	Introduction to Printing	3
PRNT 145 F	Variable Data Imaging	3
<b>Restricted Electives (14-19 units):</b>		<b>14-19</b>
PRNT 030 F	Introductory Printing Skills Lab	0.5-6
PRNT 031 F	Offset Skills Lab	0.5-6
PRNT 033 F	Digital Printing Skills Lab	0.5-6
PRNT 075 F	Electronic Prepress I	6
PRNT 085 F	Introduction to Flexography	4
PRNT 140 F	Color Management	3
PRNT 171 F	Offset Presswork	6
<b>Total Units</b>		<b>26-31</b>

### Program Student Learning Outcomes

**Outcome 1:** Create a multi-color digital printing sample produced at industry standards using a digital printing system.

## Electronic Imaging Certificate

**Division:** Technology and Engineering

### Requirements

**PROGRAM CODE:** 2C10618A

The **Electronic Imaging Certificate** is designed to provide students with practical knowledge of the electronic imaging section of the printing industry. This certificate focuses on the knowledge and practical skills used in the growing electronic imaging and digital printing areas of the printing industry, including electronic prepress, digital press operation, variable data printing, and color management. This certificate requires a total of 24 units. A grade of C or better is required in each course.

Code	Title	Units
<b>Required Courses (12 units):</b>		
PRNT 075 F	Electronic Prepress I	6
PRNT 077 F	Advanced Electronic Prepress	6
<b>Restricted Electives (12 units):</b>		
PRNT 101 F	Introduction to Printing	3
PRNT 133 F	Packaging Production	3
PRNT 140 F	Color Management	3
PRNT 142 F	Prepress for Print using Adobe Creative Suite	3
PRNT 145 F	Variable Data Imaging	3
PRNT 171 F	Offset Presswork	6
<b>Total Units</b>		<b>24</b>

## Program Student Learning Outcomes

**Outcome 1:** Create, edit and analyze electronic files for print output using application software.

**Outcome 2:** Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic imposition and color correction techniques.

## Flexography Skills Certificate

### Requirements

PROGRAM CODE: 2C00055A

(Approved by the NOCCCD Board of Trustees. Not approved by State Chancellor's Office. Not eligible for Financial Aid)

The **Flexography Certificate** provides the skills needed to operate a flexographic printing press and enter the commercial flexographic printing industry. This certificate requires completion of 11 units of required courses. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (11 units):</b>		
PRNT 101 F	Introduction to Printing	3
PRNT 085 F	Introduction to Flexography	4
PRNT 086 F	Advanced Flexography	4
<b>Total Units</b>		<b>11</b>

## Program Student Learning Outcomes

**Outcome 1:** Design and print single color labels using page layout software, plate maker and a Mark Andy 830 flexographic printing press.

**Outcome 2:** Design and print multi-color labels using illustrator software, Backstage Pilot workflow software, digital plate material and a Mark Andy 2200 flexographic printing press.

## Printing Technology (General) Certificate

### Requirements

PROGRAM CODE: 2C21269

The **Printing Technology (General) Certificate** is designed to provide the student with a basic overall understanding of the printing industry and its allied fields. Coursework in the Printing Technology Certificate program incorporates practical hands-on practice and classroom lectures. Students learn to set up and operate offset and digital printing presses and process print jobs. They also learn to create and print digital graphics, with programs like Adobe InDesign or similar often being covered. Students will learn about specialty printing as well, including flexography, package prototyping, and screen printing. This certificate requires a total of 26-31 units. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (18 units):</b>		
PRNT 050 F	Screen Printing I (formerly PRNT 072AF)	2
PRNT 075 F	Electronic Prepress I	6
PRNT 085 F	Introduction to Flexography	4

PRNT 171 F	Offset Presswork	6
<b>Restricted Electives (8-13 units):</b>		<b>8-13</b>
PRNT 030 F	Introductory Printing Skills Lab	0.5-6
PRNT 031 F	Offset Skills Lab	0.5-6
PRNT 032 F	Flexographic Printing Skills Lab (formerly PRNT 090 F)	0.5-6
PRNT 033 F	Digital Printing Skills Lab	0.5-6
PRNT 034 F	Prepress Skills Lab	0.5-6
PRNT 035 F	Screen Printing Skills Lab	0.5-6
PRNT 044 F	Self-Publishing Techniques for Sequential Art	3
PRNT 051 F	Screen Printing II (formerly PRNT 072BF)	2
PRNT 052 F	Screen Printing III (formerly PRNT 072CF)	2
PRNT 060 F	Basic Digital Printing (formerly PRNT 070 F)	2
PRNT 061 F	Intermediate Digital Imaging (formerly PRNT 070 F)	2
PRNT 062 F	Advanced Digital Imaging (formerly PRNT 070 F)	2
PRNT 077 F	Advanced Electronic Prepress	6
PRNT 086 F	Advanced Flexography	4
PRNT 101 F	Introduction to Printing	3
PRNT 133 F	Packaging Production	3
PRNT 140 F	Color Management	3
PRNT 142 F	Prepress for Print using Adobe Creative Suite	3
PRNT 145 F	Variable Data Imaging	3
PRNT 172 F	Intermediate Offset Presswork	6
PRNT 973 F	Advanced Offset Presswork	6
<b>Total Units</b>		<b>26-31</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proper operational skills required to operate a central impression flexographic printing press to produce single color labels.

**Outcome 2:** Produce an offset printing plate produced to industry standards.

## Printing Technology Associate in Science Degree

### Requirements

PROGRAM CODE: 2S03837

The **Printing Technology Associate in Science Degree** provides the skills needed to enter the printing industry at entry level and teaches skills in digital imaging systems, offset lithographic presswork, prepress for offset and flexography, screen printing, flexographic presswork, package production, and applications of graphic design. This degree requires a total of 24-29 units from the list of courses below.

Code	Title	Units
<b>Select from the following (24-29 units):</b>		<b>24-29</b>
PRNT 050 F	Screen Printing I (formerly PRNT 072AF)	2
PRNT 051 F	Screen Printing II (formerly PRNT 072BF)	2
PRNT 052 F	Screen Printing III (formerly PRNT 072CF)	2

PRNT 060 F	Basic Digital Printing (formerly PRNT 070 F)	2
PRNT 061 F	Intermediate Digital Imaging (formerly PRNT 070 F)	2
PRNT 062 F	Advanced Digital Imaging (formerly PRNT 070 F)	2
PRNT 075 F	Electronic Prepress I	6
PRNT 077 F	Advanced Electronic Prepress	6
PRNT 085 F	Introduction to Flexography	4
PRNT 086 F	Advanced Flexography	4
PRNT 101 F	Introduction to Printing	3
PRNT 133 F	Packaging Production	3
PRNT 140 F	Color Management	3
PRNT 142 F	Prepress for Print using Adobe Creative Suite	3
PRNT 145 F	Variable Data Imaging	3
PRNT 171 F	Offset Presswork	6
PRNT 172 F	Intermediate Offset Presswork	6
PRNT 973 F	Advanced Offset Presswork	6
<b>Total Units</b>		<b>24-29</b>

## Program Student Learning Outcomes

**Outcome 1:** Produce a four-color poster with proper registration and color densities to industry standards with a multicolor sheet-fed offset printing press.

**Outcome 2:** View printed samples and identify printing defects.

## Quick Print/In-Plant Graphics Certificate

Division: Technology and Engineering

### Requirements

PROGRAM CODE: 2C10620A

The **Quick Print/In-Plant Graphics Certificate** provides the skills needed to enter the small commercial printing industry. The Quick Print/In-Plant Graphics Certificate requires a total of 22-24 units of which 8 units are in required courses. An additional 14-16 units must be chosen from the restricted electives listed below. A grade of C or better is required in each course.

Code	Title	Units
<b>Required Courses (8 units):</b>		
PRNT 060 F	Basic Digital Printing (formerly PRNT 070 F)	2
PRNT 101 F	Introduction to Printing	3
PRNT 145 F	Variable Data Imaging	3
<b>Restricted Electives (14-16 units):</b>		
PRNT 075 F	Electronic Prepress I	6
PRNT 085 F	Introduction to Flexography	4
PRNT 090 F	Printing Skills Lab	0.5-6
PRNT 140 F	Color Management	3

PRNT 171 F	Offset Presswork	6
<b>Total Units</b>		<b>22-24</b>

## Program Student Learning Outcomes

**Outcome 1:** Create a multi-color digital printing sample produced at industry standards using a digital printing system.

**Outcome 2:** Create a single-color offset printing sample produced at industry standards using a digital printing system.

## Screen Printing Certificate

### Requirements

PROGRAM CODE: 2C10621A

The **Screen Printing Certificate** is designed to provide students with the skills needed to enter the screen-printing industry. Students will learn how to screen print on various substrates, including textiles, paper and other specialty substrates. This certificate requires the completion of 24-26 units, of which 12 are in required courses. An additional 12-14 units must be chosen from the restricted electives listed below. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (12 units):</b>		
PRNT 050 F	Screen Printing I (formerly PRNT 072AF)	2
PRNT 051 F	Screen Printing II (formerly PRNT 072BF)	2
PRNT 052 F	Screen Printing III (formerly PRNT 072CF)	2
PRNT 075 F	Electronic Prepress I	6
<b>Restricted Electives (12-14 units):</b>		
PRNT 060 F	Basic Digital Printing (formerly PRNT 070 F)	2
PRNT 077 F	Advanced Electronic Prepress	6
PRNT 101 F	Introduction to Printing	3
PRNT 140 F	Color Management	3
PRNT 142 F	Prepress for Print using Adobe Creative Suite	3
PRNT 145 F	Variable Data Imaging	3
PRNT 171 F	Offset Presswork	6
<b>Total Units</b>		<b>24-26</b>

## Program Student Learning Outcomes

**Outcome 1:** Produce a multi-color printing sample produced by industry standards using a screen printing press.

**Outcome 2:** Apply terminology of screen printing and produce various single- and multi-color prints at industry standards using a screen printing press.



# Psychology

Division: Social Sciences

## Faculty

Julie Felender  
Tracy Guild  
Brian Lopez  
Katheryn McGuthry  
Jeana Wolfe

## Degrees and Certificates

- Psychology Associate in Arts Degree (p. 451)
- Psychology Associate in Arts Degree for Transfer (p. 451)

## Courses

### PSY 101 F General Psychology 3 Units

54 hours lecture per term. This course is a scientific introduction to the major fields of psychology. These fields include research methodology, cognition, memory, perception, sensation, motivation, emotion, learning, and developmental, social, personality, abnormal, and physiological psychology. Students will learn the principles, theories, and research on human actions, emotions, and cognition. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 110)

### PSY 101HF Honors General Psychology 3 Units

54 hours lecture per term. This Honors-enhanced course is a scientific introduction to the major fields of psychology including research methodology, cognition, memory, perception, sensation, motivation, emotion, learning, developmental, social, personality, abnormal, and physiological psychology. Students will learn and analyze the principles, theories, and research on human actions, emotions, and cognition. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 110)

### PSY 110 F Introduction to Applied Psychology 3 Units

54 hours lecture per term. In this course, students apply psychological principles, theories and research to specific situations and phenomena. Psychological principles will be applied to situations that might occur during college life, during personal familial and social experiences, in one's career or at school, or in the context of mental health and well-being. This course is not the same as PSY 101 F and cannot be taken in place of it. (Degree Credit) (CSU)

### PSY 120 F Human Sexuality 3 Units

54 hours lecture per term. This course covers a broad field in which many cultural, psychological and physiological variables interact in relation to sexual development, attitudes and behaviors. The methods of scientific psychology are utilized to improve understanding of a broad range of behaviors ranging from healthy to dysfunctional within mainstream modern American culture and American minority groups as well as peoples of other cultures and historical eras. Discussion of differing cultural and moral perspectives is utilized to assist students in making a critical assessment of the nature of the sexual self as well as intimate human relationships within their own community and the world. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: PSY 130)

### PSY 131 F Cross Cultural Psychology 3 Units

54 hours lecture per term. This course is an introduction to culture's influence on human behavior and mental processes. Beginning with an examination of theoretical definitions of culture, the course covers a broad range of theories and research findings regarding cultural influences on human behavior and cognitive processes (life-span development, abnormal behavior and mental health, self-concept, emotion, motivation, learning, intelligence, perception, memory, communication, social cognition, and social behavior). The diversity of human expression is examined in contexts ranging from everyday modes of functioning to family and work relationships. By providing students with a non-judgmental understanding of how culture influences human behavior, this course will make them more equipped to interact in a world where there is increasing contact among different cultures. In addition, students will gain knowledge in cross-cultural research methodology. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### PSY 139 F Developmental Psychology - Life Cycle 3 Units

**Prerequisite(s):** PSY 101 F or PSY 101HF, with a grade of C or better

54 hours lecture per term. This course explores the entire lifespan, including infancy, childhood, adolescence, adulthood, old age, and death. Students will study and evaluate psychological, sociological, and biological theories and facts related to human development. Physical, social, emotional, intellectual, cognitive and moral developments are among the topics covered. Students will study and evaluate research methodologies and the many factors thought to influence healthy development. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 180)

### PSY 145 F Child Psychology 3 Units

54 hours lecture per term. In this course, the psychology of development will be studied from the prenatal stage through adolescence across the domains of physical, cognitive and psychosocial changes. Theoretical viewpoints and research findings will be applied to real-life situations. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

### PSY 161 F Elementary Statistics for Behavioral Science 4 Units

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance.

72 hours lecture per term. This course introduces students to descriptive and inferential statistical methods. These methods are essential to the understanding, interpretation, and performance of scientific research. Topics covered include presentation of graphic data, probability theory, hypothesis testing, correlation analysis, analysis of variance, and basic research design. Experience with calculators and computers is provided. (Degree Credit) (CSU) (UC Credit Limitation; PSY 161 F, PSY 161HF, MATH 120 F, MATH 120HF and SOSC 120 F, combined; maximum credit one course) (AA GE, CSU GE, IGETC (C-ID: MATH 110)

### PSY 161HF Honors Elementary Statistics for Behavioral Science 4 Units

**Prerequisite(s):** MATH 040 F with a grade of C or better or math skills clearance.

72 hours lecture per term. This Honors-enhanced course introduces students to descriptive and inferential statistical methods. These methods are essential to the understanding, interpretation, and performance of scientific research. Topics covered include presentation of graphic data, probability theory, hypothesis testing, correlation analysis, analysis of variance, and basic research design. Experience with calculators and computers is provided. (Degree Credit) (UC Credit Limitation; PSY 161 F, PSY 161HF, MATH 120 F, MATH 120HF and SOSC 120 F combined, maximum credit one course) (AA GE, CSU GE, IGETC (C-ID: MATH 110)

**PSY 199 F Psychology Independent Study****1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

**PSY 202 F Research Methods in Psychology****4 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF and PSY 161 F or PSY 161HF with a grade of C or better.

54 hours lecture and 54 hours lab per term. This course is designed for students who wish to explore in greater depth the theories, concepts, and research areas of methods of modern day psychology. Emphasis is on the scientific study of human behavior and mental processes using experimental and other research strategies. Skills in designing, implementing, analyzing, and writing scientific research studies will be included. Opportunities for field experiences in various psychological settings, such as research centers and regional psychological conferences are available. Consideration of research in multicultural contexts is addressed. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 205B)

**PSY 202HF Honors Research Methods in Psychology****4 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF and PSY 161 C or PSY 161HF with a grade of C or better.

54 hours lecture and 54 hours lab per term. This Honors-enhanced course is designed for students who wish to explore in greater depth the theories, concepts, and research areas of methods of modern day psychology. Emphasis is on the scientific study of human behavior and mental processes using experimental and other research strategies. Skills in designing, implementing, analyzing, and writing scientific research studies will be included. Opportunities for field experiences in various psychological settings, such as research centers and regional psychological conferences, are available. Consideration of research in multicultural contexts is addressed. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 205B)

**PSY 219 F The Human Services****3 Units**

54 hours lecture per term. This course covers the history and philosophy of the human services, the needs of various client groups, and differences between practice settings. Goals and services of various human service agencies will be explored through field visits, case studies, service learning, and guest speakers. Career preparation for various human service positions will be covered. (Degree Credit) (CSU)

**PSY 221 F The Brain and Behavior****3 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF with a grade of C or better

54 hours lecture per term. This course examines the neurophysiological and biological processes associated with behavior and mental processes. Emphasis is placed on the structure and function of the brain and other central nervous system structures. Related processes such as the autonomic nervous system, the endocrine system and the immune system also are addressed. Some of the specific topics studied in the context of the brain include learning, sensation, perception, emotion, motivation, cognition, relationships memory, stress, psychological disorders and brain dysfunction. (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 150)

**PSY 222 F Abnormal Psychology****3 Units**

**Prerequisite(s):** PSY 101 F or PSY 101HF, with a grade of C or better

54 hours lecture per term. This course presents a scientific survey of the sub-field of psychology interested in researching the nature and causes of deviant or unusual human behavior both within and across cultures. This course surveys types of abnormal behavior, the process of assessing and diagnosing abnormal behavior, the therapeutic modalities used to treat abnormal behavior, and the scientific methods used to conduct research on abnormal behavior. This course draws upon DSM diagnostic criteria to classify abnormal behavior, and humanistic, cognitive, behavioral, cross-cultural, psychodynamic, and biologically-based models and theories to frame an understanding of abnormal behavior. Issues relating to research, treatment and forensic psychology are considered. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 120)

**PSY 233 F The Psychology of Adjustment****3 Units**

54 hours lecture per term. In this course, students will study a variety of types of adjustment, both functional and dysfunctional. For example, students might study emotional, behavioral or cognitive adjustment in the family or work setting. Students also will study the factors that seem to produce functional and dysfunctional adjustment as well as common treatments for dysfunctional adjustment. Such treatments might include cognitive therapy, humanistic therapy, behavior modification, systems therapy, or stress management. (Degree Credit) (CSU) AA GE (C-ID: PSY 115)

**PSY 251 F Social Psychology****3 Units**

54 hours lecture per term. This course presents a scientific survey of the sub-field of psychology that seeks to understand the nature, causes, and influences of the social context upon the individual and of the individual upon the social context. In this survey course, students will be exposed to basic theories, concepts, and empirical findings in such areas as social perception, social cognition, prejudice, discrimination, interpersonal attraction, conformity and obedience, bystander effects, social aggression, group dynamics, attribution theory and development of self in the social setting. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 170)

**PSY 251HF Honors Social Psychology****3 Units**

54 hours lecture per term. This Honors-enhanced course presents a scientific survey of the sub-field of psychology that seeks to understand the nature, causes, and influences of the social context upon the individual and of the individual upon the social context. Students will be exposed to basic theories, concepts, and empirical findings in such areas as social perception, social cognition, prejudice, discrimination, interpersonal attraction, conformity and obedience, by-stander effects, social aggression, group dynamics, attribution theory, and development of self in the social setting. As an Honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: PSY 170)

**PSY 299 F Psychology Independent Study - Advanced****1 Unit**

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of the research process and literature reviews through individual study and small group conferences. Students successfully completing this course will be awarded elective units in the Social Sciences area. Approval of the instructor is required. (Degree Credit) (CSU)

## Psychology Associate in Arts Degree Requirements

PROGRAM CODE: 2A03875

The **Psychology Associate in Arts Degree** provides students with a background that has both breadth and depth, and focuses on the science, theories and applications of psychology. This degree will give students an understanding of psychology that might be useful to his or her personal life, career outside of psychology, or future major and career in psychology. Coursework examines the biological and experiential factors that influence human behavior. Because of the scientific nature of psychology, most colleges require undergraduate psychology majors to take General Psychology, Statistics and a Research Methods class, and these three courses are the core requirements of the AA Degree in Psychology at Fullerton College, as well. These courses fulfill 11 of the 20 units required for this degree. An additional 9 units must be chosen from restricted electives. The 3 core courses, as well as the 3 (or more) electives will provide the opportunity for students to think critically about human behavior, to learn the diversity of human behavior and disorders, to learn how psychology affects us at different stages of life, and to apply psychology to real world situations or problems. NOTE: Students planning to transfer to a local CSU may also want to consider the Psychology AA-T Degree.

Code	Title	Units
<b>Required Courses (11 units):</b>		
PSY 101 F or PSY 101HF	General Psychology Honors General Psychology	3
PSY 161 F or PSY 161HF	Elementary Statistics for Behavioral Science Honors Elementary Statistics for Behavioral Science	4
PSY 202 F or PSY 202HF	Research Methods in Psychology Honors Research Methods in Psychology	4
<b>Restricted Electives</b>		
<i>Select three of the following categories (A, B, C and/or D) and choose one 3 unit course from each category:</i>		9
<i>Category A</i>		
PSY 139 F	Developmental Psychology - Life Cycle	3
PSY 145 F	Child Psychology	3
<i>Category B</i>		
PSY 110 F	Introduction to Applied Psychology	3
PSY 219 F	The Human Services	3
PSY 233 F	The Psychology of Adjustment	3
<i>Category C</i>		
PSY 222 F	Abnormal Psychology	3
PSY 251 F	Social Psychology	3
PSY 251HF	Honors Social Psychology	3
PSY 221 F	The Brain and Behavior	3
<i>Category D</i>		
PSY 120 F	Human Sexuality	3
PSY 131 F	Cross Cultural Psychology	3
<b>Total Units</b>		<b>20</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify why psychology is considered a science.

**Outcome 2:** Identify appropriate statistical tests to be conducted on data for specific types of research studies.

**Outcome 3:** Summarize and critically evaluate research articles as well as information presented in the popular media.

## Psychology Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A30885

The **Associate in Arts Degree in Psychology for Transfer**, also called the Psychology AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in psychology. Students earning the Psychology AA-T degree will be granted priority for admission as a Psychology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18-20 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better. There are no additional graduation requirements. The scientific field of psychology examines the psychological, cognitive, biological, social and cultural factors that describe, explain and influence behavior.

The Psychology AA-T Degree provides students with a background that has both breadth and depth, and focuses on the science, theories and applications of psychology, with an emphasis on CSU transfer requirements. This degree will provide students with an understanding of psychology that prepares him/her for transfer to CSU and a future degree in psychology, a career outside the field of psychology, and an understanding of behavior that is beneficial to one's personal life and professional career outside psychology. The Psychology AA-T Degree requires a total of 18-20 units of required courses and restricted electives from the categories below as indicated.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (11 units):</b>		
PSY 101 F or PSY 101HF	General Psychology Honors General Psychology	3
and		
PSY 161 F or PSY 161HF	Elementary Statistics for Behavioral Science Honors Elementary Statistics for Behavioral Science	4
and		
PSY 202 F or PSY 202HF	Research Methods in Psychology Honors Research Methods in Psychology	4
<b>List A (3-5 units):</b>		<b>3-5</b>
BIOL 100 F	Principles of Biology	4
BIOL 101 F	General Biology	5
PSY 221 F	The Brain and Behavior	3
<b>List B (3 units):</b>		<b>3</b>
PSY 139 F	Developmental Psychology - Life Cycle	3
PSY 145 F	Child Psychology	3
PSY 222 F	Abnormal Psychology	3
PSY 251 F or PSY 251HF	Social Psychology Honors Social Psychology	3
<b>List C (3 units):</b>		<b>3</b>
<b>Any course from List B not already used. Or,</b>		
PSY 110 F	Introduction to Applied Psychology	3
PSY 120 F	Human Sexuality	3
PSY 131 F	Cross Cultural Psychology	3
PSY 219 F	The Human Services	3
<b>Total Units</b>		<b>20-22</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify why psychology is considered a science.

**Outcome 2:** Identify appropriate statistical tests to be conducted on data for specific types of research studies.

**Outcome 3:** Summarize and critically evaluate research articles as well as information presented in the popular media.

## Real Estate

Division: Business and Computer Information Systems

### Faculty

Richard Ghidella

### Degrees and Certificates

- Real Estate Management Associate in Science Degree (p. 454)
- Real Estate Management Certificate (p. 454)
- Real Estate Sales Certificate (p. 455)
- Real Estate Sales Skills Certificate (p. 455)

## Courses

### RE 101 F Principles of Real Estate 3 Units

54 hours lecture per term. This course covers the fundamentals of California real estate. The development of real estate in California and an introductory study of ownership, appraisal, law, practices, financing, land and location values, transfers, trends, regulations, and economic effects are stressed. This course fulfills the educational prerequisite for California state licensing requirements. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

### RE 102 F Legal Aspects of Real Estate 3 Units

54 hours lecture per term. This course covers California real estate property law. Topics include acquisitions and transfers, methods and incidents of ownership, easements, fixtures, land descriptions, recording, covenants, conditions and restrictions, zoning ordinances, leases, brokers, escrow, title insurance and probate proceedings. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

### RE 103 F Escrow 3 Units

54 hours lecture per term. This course discusses the methods and techniques of escrow procedure for various types of real estate transactions, including the legal/ethical responsibilities engaged in escrow work. This course fulfills the educational prerequisite for California state licensing requirements. (Degree Credit) (CSU)

### RE 201 F Real Estate Practice 3 Units

54 hours lecture per term. This course covers professional aspects of the real estate business. Topics include an overview of the real estate industry, ethics and licensing requirements; hands-on completion of contracts, forms, and disclosure documents; prospecting strategies for obtaining clients; listing properties and servicing those listings; marketing techniques; strategies for showing property; obtaining and handling offers; closing sales transactions; financing, escrow, title and taxation issues; and 1031 exchange requirements for investment property. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

### RE 202 F Real Estate Finance 3 Units

54 hours lecture per term. This course covers various financing options for California real estate transactions. Topics include government loan programs, creative financing, loan sources, types of lenders, financing investment property, foreclosures, first-time buyer programs, solving financing challenges for low-to-moderate income purchasers, the problems, policies, and risks involved in financing a variety of real estate properties. Techniques of using security devices, legal aspects of mortgages and related instruments, return of mortgage and equity capital, where and how to best obtain funds, procedures in financing real estate sales and exchanges, governmental impact, junior financing and mathematics of real estate finance are also included. This course fulfills education prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 203 F Appraisal: Residential****3 Units**

54 hours lecture per term. This course is designed to interpret real estate valuation procedures, examine real estate appraisal used in establishing real estate market values, and develop the knowledge and skills necessary for application or interpretation of appraisal information. Topics include the uniform standards of professional appraisal practice, location analysis and site evaluation, the appraisal process, reproduction cost estimating, depreciation, market data and interpretation, cost, income approaches to value, and the appraisal report. NOTE: Course qualifies for continuing education for real estate licensees. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

**RE 204 F Appraisal: Income****3 Units**

54 hours lecture per term. This course covers property other than the single-family residence. The income approach and capitalization techniques are emphasized. Also included is an in-depth study of the following: discounted cash flow, valuation of partial and leasehold interests, and uniform standards of professional appraisal practice, interpretation, cost and income approaches to value, and the appraisal report. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

**RE 205 F Property Management****3 Units**

54 hours lecture per term. This course covers the management, maintenance, rehabilitation, purchase, and sale of income property. It is intended for property owners and those wishing to become property managers. Topics covered in the course include management of residential, commercial, and industrial properties. Discussions for these various types of properties will revolve around examinations of leases and lease negotiation, tenant relations, maintenance, modernization and decoration, rehabilitation, insurance, tax aspects, office management, public relations, and advertising. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 206 F Real Estate Economics****3 Units**

54 hours lecture per term. This course covers the economic principles used to analyze the impact that national, regional, community, and neighborhood trends have on real estate values. General economic theory and applied real estate practices are linked. Students will apply these principles in order to analyze an investment on an actual multi-unit apartment building. This course fulfills the educational prerequisite for California state licensing requirement and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 207 F Mortgage Loan Brokering in California****3 Units**

54 hours lecture per term. This course covers the aspects of mortgage brokering operations. Topics include understanding the history of the mortgage loan brokerage business; developing and marketing your own mortgage loan brokerage business; developing a business plan; selecting the proper loan for a prospective borrower; understanding and completing Federal Truth in Lending compliance and disclosure reports; pre-qualifying prospective borrowers; completing a loan application package; calculating an underwriting worksheet, and identifying potential "Red Flag" lending problems. NOTE: Course meets Department of Real Estate Requirements for Broker and Salesperson licenses. (CSU) (Degree Credit)

**RE 208 F Basic Appraisal Principles and Procedures****3.5 Units**

63 hours lecture per term. This course meets the requirements of the Appraisal Qualifications Board from the Appraisal Foundation. The emphasis of this course is on residential real estate. This course covers the basic real estate appraisal principles, basic real estate appraisal procedures, and meets the license requirements for all levels of appraisal licenses. It is required for the trainee licensee, residential license, certified residential license, and certified general license. This course qualifies with the California Department of Real Estate as a statutory/pre-license real estate course for both the salesperson and broker education requirements. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 209 F Residential Real Estate Appraisal****3.5 Units**

63 hours lecture per term. This course focuses on developing an understanding of residential real estate appraisal. Course meets the license requirements for all appraisal licenses, for broker and salesperson licenses, as well as Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 210 F Advanced Residential Appraisal Applications and Residential Report Writing****3.5 Units**

63 hours lecture per term. This course meets the requirements of the Appraisal Qualifications Board of the Appraisal Foundation. This course covers advanced residential applications and case studies, as well as residential report writing and case studies. This course meets the license requirements for all levels of appraisal licenses. It is required for the trainee license, residential license, certified residential license, and the certified general license. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

**RE 212 F Uniform Standards of Professional Appraisal Practice (USPAP)****1 Unit**

18 hours lecture per term. This course is designed to meet the requirements of the Appraisal Qualifications Board (AQB) of the Appraisal Foundation for state licensing and certification. This course includes the national exam as required by the AQB. Completion of this course and successful completion of the three-hour national exam (the course final exam) are required by the California Office of Real Estate Appraisers (OREA) for initial trainee licensure. (CSU) (Degree Credit)

**RE 252 F Advanced Real Estate Finance****3 Units**

Pass/No Pass or Letter Grade option. 54 hours lecture per term. This course covers real estate investment through the application of financial principles including probability, risk analysis, value relationships, and capitalization of income to make informed property investment decisions. Emphasis is placed on an understanding of investment financing options, pro forma financial statements, effects of leverage and cash flow operating statements and highest and best use. Topics include understanding market trends by real estate sector and developing strategies for decision-making alternatives for acquisition, holding period, sale, and tax-deferred exchanges. This course fulfills education prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (Degree Credit) (CSU)

**RE 298 F Advanced Topics in Real Estate****0.5-3 Units**

0-54 hours lecture and 0-54 hours lab per term. This course offers advanced real estate topics designed to enhance job skills, expand the student's knowledge of the marketplace, and increase employment opportunities. Consult the class schedule to verify specific topic area and credit for a particular semester. (CSU) (Degree Credit)

# Real Estate Management Associate in Science Degree

## Requirements

PROGRAM CODE: 2S03826

The **Real Estate Management Associate in Science Degree** is designed to prepare students for employment in the real estate industry. Students are offered a wide variety of real estate courses ranging from real estate principles to real estate practices, appraisal, finance, investment, sales and legal aspects. Additionally, the student will meet the educational requirements to apply for a Real Estate Salesperson License and the Real Estate Brokers' License with the California Department of Real Estate. A grade of C or better is required in each course taken. This certificate requires 36-40 units.

Code	Title	Units
<b>Core Courses - Select from the following (18-19 units):</b>		<b>18-19</b>
BUS 246 F	Business Law II (formerly BUS 241BF)	3
BUS 295 F	Business Internship (formerly BUS 061 F)	2-4
RE 101 F	Principles of Real Estate	3
RE 102 F	Legal Aspects of Real Estate	3
RE 201 F	Real Estate Practice	3
RE 202 F	Real Estate Finance	3
RE 203 F	Appraisal: Residential	3
RE 204 F	Appraisal: Income	3
<b>Select one course from the following (3-5 units):</b>		<b>3-5</b>
ACCT 001 F	Accounting for Small Business	3
ACCT 101AF	Financial Accounting	5
or ACCT 102HF	Honors Financial Accounting	
<b>Select one course from the following (3 units):</b>		<b>3</b>
BUS 111 F	Business Communications	3
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Select one course from the following (3 units):</b>		<b>3</b>
BUS 100 F	Introduction to Business	3
BUS 180 F	Small Business Management	3
RE 207 F	Mortgage Loan Brokering in California	3
<b>Select one course from the following (3 units):<sup>1</sup></b>		<b>3</b>
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 245 F	Business Law I (formerly BUS 241AF)	3
<b>Select one course from the following (3-4 units):</b>		<b>3-4</b>
BUS 112 F	Public Speaking for Business	4
CIS 100 F	Introduction to Personal Computers	4
or CIS 100HF	Honors Introduction to Personal Computers	
CIS 111 F	Introduction to Information Systems	4
or CIS 111HF	Honors Introduction to Information Systems	
CIS 150 F	Introduction to the Internet	3
MKT 103 F	Principles of Advertising	3
MKT 151 F	Digital Marketing (formerly New Media)	3
MKT 208 F	Principles of Selling	3

<b>Select one course from the following (3 units):</b>		<b>3</b>
BUS 162 F	Business Economics	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
RE 206 F	Real Estate Economics	3
<b>Total Units</b>		<b>36-40</b>

<sup>1</sup> See counselor for determination of correct course.

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency of the basic principles of California real estate.

**Outcome 2:** Utilize a working vocabulary of business terminology.

**Outcome 3:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Real Estate Management Certificate

### Requirements

PROGRAM CODE: 2C21260

The **Real Estate Management Certificate** enables the student to meet the educational requirements to apply for a Real Estate Salesperson License and the Real Estate Brokers' License with the California Department of Real Estate. A grade of C or better is required in each course taken. This certificate requires 36-40 units.

Code	Title	Units
<b>Required Courses (18-19 units):</b>		<b>18-19</b>
BUS 246 F	Business Law II (formerly BUS 241BF)	3
BUS 295 F	Business Internship (formerly BUS 061 F)	2-4
RE 101 F	Principles of Real Estate	3
RE 102 F	Legal Aspects of Real Estate	3
RE 201 F	Real Estate Practice	3
RE 202 F	Real Estate Finance	3
RE 203 F	Appraisal: Residential	3
RE 204 F	Appraisal: Income	3
<b>Select from the following (3-5 units):</b>		<b>3-5</b>
ACCT 001 F	Accounting for Small Business	3
ACCT 101AF	Financial Accounting	5
<b>Select from the following (3 units):</b>		<b>3</b>
BUS 111 F	Business Communications	3
BUS 211 F	Critical Reasoning and Writing for Business (formerly Writing for Business)	3
or BUS 211HF	Honors Critical Reasoning and Writing for Business (formerly Honors Writing for Business)	
<b>Select from the following (3 units):</b>		<b>3</b>
BUS 100 F	Introduction to Business	3
BUS 180 F	Small Business Management	3
RE 207 F	Mortgage Loan Brokering in California	3
<b>Select from the following (3 units):<sup>1</sup></b>		<b>3</b>
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
BUS 245 F	Business Law I (formerly BUS 241AF)	3

**Select from the following (3-4 units):** **3-4**

BUS 112 F	Public Speaking for Business	4
CIS 100 F	Introduction to Personal Computers	4
CIS 111 F	Introduction to Information Systems	4
or CIS 111HF	Honors Introduction to Information Systems	
CIS 150 F	Introduction to the Internet	3
MKT 103 F	Principles of Advertising	3
MKT 151 F	Digital Marketing (formerly New Media)	3
MKT 208 F	Principles of Selling	3

**Select from the following (3 units):** **3**

BUS 162 F	Business Economics	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
RE 206 F	Real Estate Economics	3

**Total Units** **36-40**<sup>1</sup> See counselor for determination of correct course.

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency of the basic principles of California real estate.**Outcome 2:** Use a working vocabulary of business terminology.**Outcome 3:** Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Real Estate Sales Certificate

**Division: Business and Computer Information Systems**

### Requirements

**PROGRAM CODE:** 2C37107A

The **Real Estate Sales Certificate** is designed to prepare students for a career in real estate. The program will provide the details and classroom experience for the student seeking to enter the real estate profession and/or for the individual seeking to learn more about real estate as a prospective homeowner or real estate investor. Upon program completion, students will have completed the courses required to sit for the California Real Estate Sales license. A grade of C or better is required in each course taken. This certificate requires 18-20.5 units.

Code	Title	Units
<b>Required Courses (6 units):</b>		
RE 101 F	Principles of Real Estate	3
RE 201 F	Real Estate Practice	3
<b>Restricted Electives - Select from the following (12-14.5 units):</b> <b>12-14.5</b>		
ACCT 100 F	Small Business Accounting	3
or ACCT 101AF	Financial Accounting	
or ACCT 102HF	Honors Financial Accounting	
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
or BUS 245 F	Business Law I (formerly BUS 241AF)	
BUS 246 F	Business Law II (formerly BUS 241BF)	3
RE 102 F	Legal Aspects of Real Estate	3

RE 202 F	Real Estate Finance	3
RE 203 F	Appraisal: Residential	3
RE 204 F	Appraisal: Income	3
RE 205 F	Property Management	3
RE 206 F	Real Estate Economics	3
RE 207 F	Mortgage Loan Brokering in California	3
RE 208 F	Basic Appraisal Principles and Procedures	3.5

**Total Units** **18-20.5**

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency of the basic principles of California real estate.**Outcome 2:** Use a working vocabulary of real estate terminology.

## Real Estate Sales Skills Certificate

**Division: Business and Computer Information Systems**

### Requirements

**PROGRAM CODE:** 2C40640

The **Real Estate Sales Skills Certificate** can help on your journey to becoming a real estate professional. This certificate meets the minimum requirements for students to apply for a Real Estate Salesperson License with the California Department of Real Estate. This certificate is designed to prepare students to work in various real estate fields such as property management, real estate sales and leasing, or property development. A grade of C or better is required in each course taken. This certificate requires 9 units.

Code	Title	Units
<b>Required Courses (6 units):</b>		
RE 101 F	Principles of Real Estate	3
RE 201 F	Real Estate Practice	3
<b>Restricted Electives (3 units):</b> <b>3</b>		
ACCT 100 F	Small Business Accounting	3
BUS 240 F	Legal Environment of Business	3
or BUS 240HF	Honors Legal Environment of Business	
or BUS 245 F	Business Law I (formerly BUS 241AF)	
RE 102 F	Legal Aspects of Real Estate	3
RE 202 F	Real Estate Finance	3
RE 203 F	Appraisal: Residential	3
RE 205 F	Property Management	3
RE 206 F	Real Estate Economics	3
RE 207 F	Mortgage Loan Brokering in California	3
<b>Total Units</b>		<b>9</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate proficiency of the basic principles of California Real Estate.**Outcome 2:** Use a working vocabulary of the business/real estate industry.

# Social Justice Studies

Division: Social Sciences

Social Justice Studies Associate in Arts Degree for Transfer (p. 456)

## Social Justice Studies Associate in Arts Degree for Transfer

Division: Social Sciences

### Requirements

PROGRAM CODE: 2A37628

The **Social Justice Studies Associate in Arts Degree for Transfer** prepares students to transfer to CSU and other college/university campuses that offer bachelor's degrees in Social Justice Studies; Modern Jewish Studies; Sociology -Concentration in Critical Race Studies; Sociology – Concentration Race, Class, and Gender; Sociology with Inequalities and Diversity Option; Social Science with Emphasis in Islamic and Arabic Studies. Ed Code Section 66746-66749 states students earning the Social Justice Studies: General Associate in Arts Degree for Transfer will be granted priority for admission as a Social Justice Studies major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units including completion of CSU GE or IGETC and 18-20 units in the major with a cumulative GPA of 2.0 or better.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

The Social Justice Studies: General Associate in Arts Degree for Transfer allows students to gain knowledge and experience to work with culturally-diverse populations, and understand how social justice issues affect various communities. An associate's degree is intended to lead to transfer to colleges and universities offering bachelor's degrees in Social Justice Studies. Students earning this degree may transfer and pursue bachelor's degrees and careers in social service, social policy analysis, mediation and intervention, and social justice advocacy. This degree requires a total of 18-20 units.

Code	Title	Units
<b>Required Core Courses - Select three courses from the following (9 units):</b>		<b>9</b>

#### Section 1 - Select one course from the following:

ETHS 101 F	American Ethnic Studies	3
or ETHS 101HF	Honors American Ethnic Studies	
ETHS 235 F	Contemporary Social Justice Movements	3
or ETHS 235HF	Honors Contemporary Social Justice	
SOC 290 F	Sociology of Race and Ethnicity	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	

#### Section 2 - Select one course from the following:

ETHS 111 F	Women of Color in the U.S.	3
SOC 230 F	Sociology of Gender	3
or SOC 230HF	Honors Sociology of Gender	
SOSC 130 F	Introduction to LGBTQ Studies	3
WMNS 100 F	Introduction to Women's Studies	3
or WMNS 100HF	Honors Introduction to Women's Studies	

Selection 3 - Select one course from the following not already selected from the previous sections:

**LIST A: Select three courses from at least two of the following areas (9-11 units):** **9-11**

#### Area 1: History or Government

ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
ETHS 171 F	Asian Pacific Islander American History	3
HIST 154 F	Ancient Egypt	3
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3
HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3
HIST 165 F	Introduction to the Middle East	3
or HIST 165HF	Honors Introduction to the Middle East	
HIST 270 F	Women in United States History	3
POSC 110 F	Contemporary American Politics	3
or POSC 110HF	Honors Contemporary American Politics	
POSC 250 F	Gender and Politics	3

#### Area 2: Arts and Humanities

ART 211 F	Women in the Arts	3
PHIL 135 F	Social and Political Philosophy	3
PHIL 195 F	Women's Issues in Philosophy	3

#### Area 3: Social Science

PSY 131 F	Cross Cultural Psychology	3
SOC 102 F	Social Problems	3
SOC 277 F	Sociology of Religion	3
or SOC 277HF	Honors Sociology of Religion	

Area 4: Quantitative Reasoning and Research Methods (MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF, and SOSC 120 F are equivalent courses; however, SOSC 120 F is recommended for this degree)

MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
or PSY 161 F	Elementary Statistics for Behavioral Science	
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
or SOSC 120 F	Introduction to Probability and Statistics	



PSY 202 F	Research Methods in Psychology	4
or PSY 202HF	Honors Research Methods in Psychology	
or SOSC 125 F	Introduction to Research Methods	
<b>Area 5: Major Preparation</b>		
ETHS 129 F	Introduction to African-American Studies	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	

**Total Units** 18-20

## Program Student Learning Outcomes

**Outcome 1:** Analyze the effectiveness of social justice movements in their attempts to challenge racism, sexism, classism, homophobia and other institutional forms of oppression.

**Outcome 2:** Identify diverse presentations and experiences of gender in society, with special attention to the intersection between gender, race, class and sexuality.

**Outcome 3:** Identify diverse presentations and experiences of race and ethnicity in society, with special attention to the intersection between race, gender, class and sexuality.

## Social Sciences

Division: Social Sciences

### Degrees and Certificates

Law, Public Policy and Society Associate in Arts Degree for Transfer (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/social-sciences/law-public-policy-and-society-associate-in-arts-degree-for-transfer/>)

Research Fundamentals Skills Certificate (p. 457)

Volunteer Services Skills Certificate (p. 458)

### Courses

**SOSC 120 F Introduction to Probability and Statistics** 4 Units

**Prerequisite(s):** MATH 024 F or MATH 040 F or MATH 041 F or MATH 043 F with a C or better or math skills clearance.

72 hours lecture per term. This course is an introduction to probability and statistics and covers descriptive and inferential statistics as well as the probabilistic basis of statistical inference. Computers and calculators will be utilized. Data sets and problems will be from anthropology, economics, geography, political science, psychology and sociology. This course is open to all students who meet the prerequisite, but is required for anthropology and sociology majors. This course is strongly recommended for economics, ethnic studies, geography and political science majors. Psychology majors should seek the advice of a counselor before choosing between PSY 161 F and SOSC 120 F. Students who receive credit for SOSC 120 F may not receive credit for MATH 120 F. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 125, MATH 110)

**SOSC 125 F Introduction to Research Methods** 3 Units

**Prerequisite(s):** SOC 101 F or SOC 101HF with a grade of C or better  
54 hours lecture per term. This course examines fundamental elements of empirical research and the ways social scientists think critically. This course includes attention to the nature of theory, hypotheses, variables and ethics of research. Application of qualitative and quantitative analytic tools including logic and research design, such as survey, observational, experimental, case study, and comparative historical research. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 120)

**SOSC 130 F Introduction to LGBTQ Studies** 3 Units

54 hours lecture per term. This introductory course examines a broad range of contemporary lesbian, gay, bisexual, transgender, and queer issues in various contexts including bio-medical, sociological, political, racial and sexual. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SJS 130)

## Research Fundamentals Skills Certificate

Division: Social Sciences

### Requirements

PROGRAM CODE: 2C37715

The **Research Fundamentals Skills Certificate** emphasizes the skills needed to interpret research data and conduct basic research in accordance with the procedures and methods of social/behavioral science. The certificate is designed for students interested in learning research skills and for those who need assistance in improving these skills for academic and/or career advancement. This certificate includes a total of 12 units, five of which are in required courses, and seven units in restricted elective courses.

Code	Title	Units
<b>Required Courses - Select one 4-unit course and one 1-unit courses (5 units):</b>		
PSY 161 F	Elementary Statistics for Behavioral Science	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
SOSC 120 F	Introduction to Probability and Statistics	4
LIB 100 F	Introduction to Research	1
or LIB 100HF	Honors Introduction to Research	
<b>List A - Select from the following (3 units):</b>		
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
<b>List B - Select from the following (4 units):</b>		
PSY 202 F	Research Methods in Psychology	4
or PSY 202HF	Honors Research Methods in Psychology	
SOSC 125 F	Introduction to Research Methods	3
<b>Total Units</b>		<b>12</b>

## Program Student Learning Outcomes

**Outcome 1:** Construct a testable hypothesis and examine it using appropriate research methodologies.

## Volunteer Services Skills Certificate

Division: Social Sciences

### Requirements

PROGRAM CODE: 2C37714

The **Volunteer Services Skills Certificate** offers students core courses in behavioral science, combined with at least one behavioral science course that offers service learning. The academic courses provide a fundamental understanding of human behavior. A course that includes service learning requires volunteering in the community combined with written reflection on the volunteer experience. This certificate emphasizes working directly with people in need within the service-learning tradition, and it integrates academics with practice. This certificate can enrich the service of experienced volunteers, guide those interested in volunteering for the first time and transfer students interested in teaching and social service agency work, and provide early experience in public service. This certificate requires a total of 12 units chosen from the categories below as indicated.

Code	Title	Units
<b>Required Courses - List A (select one 3-unit course):</b>		<b>3</b>
PSY 101 F	General Psychology	3
or PSY 101HF	Honors General Psychology	
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
<b>Required Courses - List B (select one 3-unit course):</b>		<b>3</b>
PSY 219 F	The Human Services	3
SOC 102 F	Social Problems	3
<i>Service learning is required in PSY 219 F and/or SOC 102 F</i>		
<b>Restricted Electives (select 6 units):</b>		<b>6</b>
CDES 201 F	Child in the Home and Community	3
PSY 131 F	Cross Cultural Psychology	3
PSY 233 F	The Psychology of Adjustment	3
PSY 251 F	Social Psychology	3
or PSY 251HF	Honors Social Psychology	
SOC 250 F	Sociology of Aging	3
SOC 275 F	Marriage and Family	3
or SOC 275HF	Honors Marriage and Family	
SOC 285 F	Drugs and Society	3
SOC 290 F	Sociology of Race and Ethnicity	3
<b>Total Units</b>		<b>12</b>

## Program Student Learning Outcomes

**Outcome 1:** Explain the importance of volunteering in the community from a behavioral sciences perspective.

## Sociology

Division: Social Sciences

### Faculty

Mohammad Abdel Haq  
Angie Andrus  
Sergio Banda  
Kelly Nelson-Wright

### Degrees and Certificates

- Sociology Associate in Arts Degree (p. 460)
- Sociology Associate in Arts Degree for Transfer (p. 460)

### Courses

#### SOC 101 F Introduction to Sociology **3 Units**

54 hours lecture per term. This course introduces concepts, theories and vocabulary associated with the field of sociology. The major sociological perspectives are explored surrounding: social control, social interaction, social differentiation, and social institutions. The processes of social change are understood in the context of collective human behavior. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 110)

#### SOC 101HF Honors Introduction to Sociology **3 Units**

54 hours lecture per term. This Honors-enhanced course introduces concepts, theories and vocabulary associated with the field of sociology. The major sociological perspectives are explored surrounding: social control, social interaction, social differentiation, and social institutions. The processes of social change are understood in the context of collective human behavior. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 110)

#### SOC 102 F Social Problems **3 Units**

54 hours lecture per term. This course investigates social conditions that contribute to social problems in the U.S. and globally. This course focuses on globalization, poverty, racial and ethnic discrimination, gender stratification and sexism, ageism, crime and the criminal justice system; substance abuse; population growth, environmental problems and sustainability; and war and terrorism. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 115)

#### SOC 198 F Sociology Internship **1 Unit**

60 hours supervised unpaid internship or 75 hours paid internship per term. This course allows students to increase their knowledge of sociology through work with a social service agency or organization. (Degree Credit) (CSU) (UC Credit Limitation; UC review required)

#### SOC 199 F Sociology Independent Study **1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

- SOC 201 F Dying and Death** **3 Units**  
54 hours lecture per term. This course includes various perspectives on death, both cross-cultural and historical. Examines beliefs, traditions, rituals and practices surrounding death in the U.S.; health care systems (the hospital and the dying patient, hospice, etc.); death and the process of dying; bioethics - dying in the technology age; euthanasia suicide, funerals, grief and bereavement; the law and death, including living wills, organ donation, and autopsies; also life after death - old and new meanings. Field trips outside of regularly-scheduled class time may be required. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 230 F Sociology of Gender** **3 Units**  
54 hours lecture per term. This course focuses on a sociological analysis of the social construction of masculinity and femininity, historically and cross-culturally. Examines the debates on sex and gender, and analyzes the impact of economic and political changes on gender expectations and practices. This course focuses on macro-analyses of how institutions shape gender and microanalyses of how individuals are socialized and how they practice gender. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 140)
- SOC 230HF Honors Sociology of Gender** **3 Units**  
54 hours lecture per term. This Honors-enhanced course focuses on a sociological analysis of the social construction of masculinity and femininity, historically and cross-culturally. It examines the debates on sex and gender and analyzes the impact of economic and political changes on gender expectations and practices. This course focuses on macro-analyses of how institutions shape gender and micro-analyses of how individuals are socialized and how they practice gender. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 140)
- SOC 250 F Sociology of Aging** **3 Units**  
54 hours lecture per term. This course is an introduction of the study of aging. It is a sociological review of the characteristics, strengths and problems of older persons. Exploration includes basic theories, terminology and concepts related to aging. Health, sexuality, social supports, caregiving, living arrangements, economics and end-of-life issues will also be discussed. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 275 F Marriage and Family** **3 Units**  
54 hours lecture per term. This course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include: gender roles, love, singlehood, courtship, marriage, domestic partnerships, communication, sexuality, parenting, conflict, domestic violence, economics, divorce, step-families, diversity in families (historically and cross-culturally) and future family trends. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 130)
- SOC 275HF Honors Marriage and Family** **3 Units**  
54 hours lecture per term. This Honors-enhanced course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include: gender roles, love, singlehood, courtship, marriage, domestic partnerships, communication, sexuality, parenting, conflict, domestic violence, economics, divorce, step-families, diversity in families (historically and cross-culturally) and future family trends. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) CSU GE, AA GE, IGETC (C-ID: SOCI 130)
- SOC 277 F Sociology of Religion** **3 Units**  
54 hours lecture per term. This course is an analysis of religion as a social institution. Emphasis will be placed on the influence that religion has on members of U.S. society by examining the role religion plays in people's lives, and legitimates some existing social and economic arrangements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 277HF Honors Sociology of Religion** **3 Units**  
54 hours lecture per term. This Honors-enhanced course is an analysis of religion as a social institution. Emphasis will be placed on the influence that religion has on members of U.S. society by examining the role religion plays in people's lives, and legitimates some existing social and economic arrangements. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 280 F Media, Culture and Society** **3 Units**  
54 hours lecture per term. This course is a critical analysis of media and culture from a sociological perspective, including the ways in which media is shaped and influenced by society, culture and individuals. Topics include the role of media in ideology, identity and interaction; race, class and gender; economics and politics; social change, technology and globalization. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 285 F Drugs and Society** **3 Units**  
54 hours lecture per term. This course introduces concepts, theories and perspectives associated with the sociological analysis of drugs and alcohol. The definitions of various types of drug use, as well as drug abuse, and drug dependence will be addressed. The pharmacological perspective will also be explained, including the factors that influence drug action and the classification of psychoactive drugs and their effects. Legal drugs, such as alcohol, tobacco, and psychotherapeutic drugs will be discussed and analyzed using the sociological perspective. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 285HF Honors Drugs and Society** **3 Units**  
54 hours lecture per term. This Honors-enhanced course introduces concepts, theories and perspectives associated with the sociological analysis of drugs and alcohol. The definitions of various types of drug use, as well as drug abuse, and drug dependence will be addressed. The pharmacological perspective will also be explained, including the factors that influence drug action and the classification of psychoactive drugs and their effects. Legal drugs, such as alcohol, tobacco, and psychotherapeutic drugs will be discussed and analyzed using the sociological perspective. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC
- SOC 290 F Sociology of Race and Ethnicity** **3 Units**  
54 hours lecture per term. This course is a sociological analysis of race, ethnicity and racism. Coursework includes an examination of cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 150)
- SOC 290HF Honors Sociology of Race and Ethnicity** **3 Units**  
54 hours lecture per term. This Honors-enhanced course is a sociological analysis of race, ethnicity and racism. Coursework includes an examination of cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. This course fulfills the Multicultural Education Requirement for graduation. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**SOC 292 F Introduction to Criminology 3 Units**

54 hours lecture per term. This course is a study of theories of crimes and criminal behavior, including an explanation of crime, its causes, and how crime is measured. Major sociological and social science theories will be explored surrounding the issues of crime and criminal behavior. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SOCI 160)

**SOC 292HF Honors Introduction to Criminology 3 Units**

54 hours lecture per term. This Honors-enhanced course is a study of theories of crimes and criminal behavior, including an explanation of crime, its causes, and how crime is measured. Major sociological and social science theories will be explored surrounding the issues of crime and criminal behavior. (Degree Credit) (CSU) (UC) CSU GE, IGETC

**SOC 299 F Sociology Independent Study - Advanced 1 Unit**

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (Degree Credit) (CSU) (UC review required)

SOC 230 F	Sociology of Gender	3
or SOC 230HF	Honors Sociology of Gender	
SOC 250 F	Sociology of Aging	3
SOC 275 F	Marriage and Family	3
or SOC 275HF	Honors Marriage and Family	
SOC 277 F	Sociology of Religion	3
or SOC 277HF	Honors Sociology of Religion	
SOC 280 F	Media, Culture and Society	3
SOC 285 F	Drugs and Society	3
or SOC 285HF	Honors Drugs and Society	
SOC 290 F	Sociology of Race and Ethnicity	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	
SOC 292 F	Introduction to Criminology	3
or SOC 292HF	Honors Introduction to Criminology	
SOC 299 F	Sociology Independent Study - Advanced	1

**Total Units 18-20**

## Sociology Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A36861

The **Sociology Associate in Arts Degree** includes coursework in Sociology, the systematic, scientific study of society and social behavior. Sociologists look beyond individual events and experiences to the broader social patterns and variables that influence individuals. Sociologists study individual and group behaviors and social structures such as racism, sexism, poverty, health care, family, crime and deviance, population and the environment. An associate's degree is intended to lead to transfer to colleges and universities which offer bachelor's degrees in sociology. The sociology major is designed to provide preparation leading to careers in sociology, social work, law, criminal justice, marketing research and counseling. The Sociology Associate in Arts Degree requires a total of 18-20 units. NOTE: Students planning to transfer to a CSU should consider the Sociology AA-T Degree.

Code	Title	Units
<b>Required Course (3 units):</b>		
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
<b>Required Courses - Select any two courses (6-7 units):</b>		<b>6-7</b>
<i>NOTE: MATH 120 F, MATH 120HF, PSY 161 F, PSY 161HF and SOSC 120 F are considered equivalent courses; however, SOSC 120 F is recommended for this degree.</i>		
SOC 102 F	Social Problems	3
SOSC 120 F	Introduction to Probability and Statistics	4
SOSC 125 F	Introduction to Research Methods	3
<b>Restricted Electives (9-10 units):</b>		<b>9-10</b>
PSY 251 F	Social Psychology	3
or PSY 251HF	Honors Social Psychology	
SOC 198 F	Sociology Internship	1
SOC 199 F	Sociology Independent Study	1
SOC 201 F	Dying and Death	3

### Program Student Learning Outcomes

**Outcome 1:** Define the "sociological imagination" and identify how the discipline of sociology is relevant to the study of contemporary society.

**Outcome 2:** Differentiate between the major sociological theoretical perspectives - structural functionalism (functionalist), social conflict (conflict) and symbolic interactionism (interactionist).

**Outcome 3:** Describe current social problems, including their effects on individuals as well as societies at large.

**Outcome 4:** Examine and illustrate the use of the scientific method in the field of sociology, including reasonable knowledge of descriptive and inferential statistics.

## Sociology Associate in Arts Degree for Transfer

### Requirements

PROGRAM CODE: 2A30802

The **Sociology Associate in Arts Degree for Transfer**, also called the Sociology AA-T, prepares students to transfer to CSU campuses and/or other colleges/universities that offer bachelor's degrees in sociology. Ed Code Section 66746-66749 states students earning the Sociology AA-T degree will be granted priority for admission as a sociology major to a local CSU, as determined by the CSU campus to which the student applies. The Sociology AA-T includes coursework in Sociology, the systematic, scientific study of society and social behavior. Sociologists look beyond individual events and experiences to the broader social patterns and variables that influence individuals. Sociologists study individual and group behaviors and social structures such as racism, sexism, poverty, health care, family, crime and deviance, population and the environment. The sociology major is designed to provide preparation leading to careers in sociology, social work, law, criminal justice, marketing research and counseling. This degree requires a total of 18-19 units.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
- ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (3 units):</b>		
SOC 101 F	Introduction to Sociology	3
or SOC 101HF	Honors Introduction to Sociology	
<b>Required Core Courses: Select two courses from the list below (6-7 units):</b>		<b>6-7</b>
SOC 102 F	Social Problems	3
SOSC 120 F	Introduction to Probability and Statistics	4
SOSC 125 F	Introduction to Research Methods	3
<b>LIST A: Select any Required Core Course not already selected, or any course from the list below (6 units):</b>		<b>6</b>
SOC 230 F	Sociology of Gender	3
or SOC 230HF	Honors Sociology of Gender	
SOC 275 F	Marriage and Family	3
or SOC 275HF	Honors Marriage and Family	
SOC 290 F	Sociology of Race and Ethnicity	3
or SOC 290HF	Honors Sociology of Race and Ethnicity	
SOC 292 F	Introduction to Criminology	3
or SOC 292HF	Honors Introduction to Criminology	
<b>LIST B: Select any course not already selected from Required Core Courses or LIST A, or any course from the list below (3 units):</b>		<b>3</b>
SOC 201 F	Dying and Death	3
SOC 250 F	Sociology of Aging	3
SOC 277 F	Sociology of Religion	3
or SOC 277HF	Honors Sociology of Religion	
SOC 280 F	Media, Culture and Society	3
SOC 285 F	Drugs and Society	3
or SOC 285HF	Honors Drugs and Society	
<b>Total Units</b>		<b>18-19</b>

## Program Student Learning Outcomes

**Outcome 1:** Define the "sociological imagination" and identify how the discipline of sociology is relevant to the study of contemporary society.

**Outcome 2:** Differentiate between the major sociological theoretical perspectives - structural functionalism (functionalist), social conflict (conflict) and symbolic interactionism (interactionist).

**Outcome 3:** Demonstrate a reasonable knowledge of current social problems, including the ability to describe their effects on individuals as well as society at large.

**Outcome 4:** Demonstrate how the scientific method is used in the field of sociology, as well as demonstrate reasonable knowledge of descriptive and inferential statistics.

**Outcome 5:** Identify and evaluate different research designs that can be used to conduct quantitative research (such as survey, experiment, and other research designs).

## Spanish

Division: Humanities

### Faculty

Lina Callahan  
Kelly Kim  
Ed Linggi

### Degrees and Certificates

- Spanish Associate in Arts Degree for Transfer (p. 462)

### Courses

**SPAN 101 F Elementary Spanish I** **5 Units**  
90 hours lecture per term. This course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE (C-ID: SPAN 100)

**SPAN 101HF Honors Elementary Spanish I** **5 Units**  
90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. The course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (Degree Credit) (CSU) (UC Credit Limitation) AA GE, CSU GE (C-ID: SPAN 100)

**SPAN 102 F Elementary Spanish II** **5 Units**  
**Prerequisite(s):** SPAN 101 F with a grade of C or better or Pass or SPAN 101HF with a grade of C or better or one year of high school Spanish with a grade of C or better

90 hours lecture per term. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 110)

**SPAN 102HF Honors Elementary Spanish II 5 Units**

**Prerequisite(s):** SPAN 101 F with a grade of C or better or Pass or SPAN 101HF with a grade of C or better or Pass or one year of high school Spanish with a grade of C or better  
90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. This course continues to focus on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 110)

**SPAN 200 F Conversational Spanish 2 Units**

**Prerequisite(s):** SPAN 102 F with a grade of "C" or better or "Pass" or SPAN 102HF with a grade of "C" or better or two years of high school Spanish with a grade of "C" or better.  
Letter Grade or Pass/No Pass option. 36 hours lecture per term. This course focuses on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components are included. This course may be taken concurrently with SPAN 203 F, 204 F, 205 F, and 206 F. Instruction will be conducted entirely in Spanish. (Degree Credit) (CSU)

**SPAN 201 F Spanish for the Spanish Speaker 5 Units**

**Advisory:** Native or near-native Spanish language proficiency.  
90 hours lecture per term. This course is designed to improve the communicative skills in Spanish for bilingual students. Although the course addresses all four skills of language learning - listening comprehension, speaking, reading and writing - the emphasis of the course is to improve reading and writing skills in Spanish through the study of grammar, spelling, vocabulary and composition. Selective readings of Hispanic writers will be used to enhance knowledge of literature and culture. This class is conducted primarily in Spanish. Students that take either SPAN 101 F or SPAN 102 F or SPAN 203 (or all of these) may not receive credit for SPAN 201 F. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit, one course.) AA GE, CSU GE, IGETC

**SPAN 203 F Intermediate Spanish III 4 Units**

**Prerequisite(s):** SPAN 102 F with a grade of C or better or Pass or SPAN 102HF with a grade of C or better or Pass or two years of high school Spanish with a grade of C or better.  
72 hours lecture per term. The course includes development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit, one course) AA GE, CSU GE, IGETC

**SPAN 204 F Intermediate Spanish IV 4 Units**

**Prerequisite(s):** SPAN 201 F or SPAN 203 F, with a grade of Pass or C or better or three years of high school Spanish with a grade of C or better.  
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Spanish and Latin American culture by introducing literary readings. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: SPAN 210)

**SPAN 205 F Introduction to Spanish Literature 3 Units**

**Prerequisite(s):** SPAN 204 F with a grade of C or better or Pass or four years of high school Spanish with a grade of C or better  
54 hours lecture per term. This survey course begins with the Middle Ages to the present covering history, culture and literary writings from Spain. The instruction is in Spanish. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**SPAN 206 F Introduction to Latin American Literature 3 Units**

**Prerequisite(s):** SPAN 204 F with a grade of C or better or Pass or four years of high school Spanish with a grade of C or better  
54 hours lecture per term. This survey course begins with pre-Columbian literature to the present covering history, culture and literary writings from Latin American countries. The instruction is in Spanish. This course fulfills the Multicultural Education Requirement for graduation. Letter Grade or Pass/No Pass option. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC

**SPAN 207 F Children's Literature/Spanish 3 Units**

**Prerequisite(s):** SPAN 203 F with a grade of C or better or Pass  
This is an introductory course in children's literature of Spanish-speaking countries and books for children and adolescents published in Spanish by Hispanic authors. The focus is on the genres that constitute Spanish children's literature, from its multiple origins in folklore to contemporary fiction, non-fiction, poetry, drama and picture books. The course enables students to identify representative and meritorious texts in Spanish that reflect the cultural background, interests, values and concerns of Spanish-speaking children. It also provides extensive practice in oral and written expression through analysis, discussion and interpretation of Hispanic literature and culture. This course is recommended for high-intermediate students, as well as teachers in K-12. This course is taught entirely in Spanish. (Degree Credit) (CSU) (UC) AA GE, CSU GE

## Spanish Associate in Arts Degree for Transfer

### Requirements

**PROGRAM CODE:** 2A33126

The Spanish Associate in Arts Degree for Transfer, also called the Spanish AA-T, prepares students to transfer to CSU campuses that offer bachelor's degrees in Spanish. The Spanish AA-T Degree requires a total of 20-23 units of required courses and restricted electives from the categories below as indicated. This degree is designed to develop advanced communicative competence in listening, speaking, reading and writing in Spanish and provide an introduction to Spanish and Latin American literature and culture. While a baccalaureate degree is recommended preparation for those considering careers in fields such as teaching, education, international business, translation and interpretation, journalism, law, writing, training and development, sales, community relations, nonprofit organizations and government, completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. Pursuant to SB1440, section 66746 states that students earning the Spanish AA-T Degree will be granted priority for admission as Spanish majors to a local CSU, as determined by the CSU campus to which the student applies.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

- a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
  3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (17 units):</b>		<b>17</b>

Local departmental placement evaluation determines the course level where individual students begin the core courses. Credit or placement equivalent to two years of college level Spanish are required. If a student places out of any course and is not awarded units for that course, the student will have to take additional units to compensate for the course/units out of which they placed. Course substitutions are made at the discretion of the local college and may or may not be delineated in the local degree. Suggested substitutions include courses in List A. Additional suggested substitutions have also been provided below.

SPAN 101 F	Elementary Spanish I	5
or SPAN 101HF Honors Elementary Spanish I		
SPAN 102 F	Elementary Spanish II	5
or SPAN 102HF Honors Elementary Spanish II		
SPAN 201 F	Spanish for the Spanish Speaker	4-5
or SPAN 203 F Intermediate Spanish III		
SPAN 204 F	Intermediate Spanish IV	4
<b>List A: Select a minimum of one course from the following (3-5 units):</b>		<b>3-5</b>
SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3
ITAL 101 F	Elementary Italian I	5
ITAL 102 F	Elementary Italian II	5
ITAL 203 F	Intermediate Italian III	4
ITAL 204 F	Intermediate Italian IV	4
FREN 101 F	Elementary French I	5
FREN 102 F	Elementary French II	5
FREN 203 F	Intermediate French III	4
FREN 204 F	Intermediate French IV	4
PORT 101 F	Elementary Portuguese I	5
PORT 102 F	Elementary Portuguese II	5

As noted, some students may need courses to substitute for units out of which they placed. Suggested course substitutions include courses from List A or the courses suggested below. Note that all course substitutions must be CSU transferable and students cannot be required to take more than one course that is not articulated.

ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF Honors Cultural Anthropology		
ANTH 105 F	Language and Culture	3

COMM 120 F	Intercultural Communication	3
ENGL 210 F	Introduction to Language Structure and Use	3
<b>Total Units</b>		<b>20-22</b>

## Program Student Learning Outcomes

**Outcome 1:** Refine Spanish oral and written production in response to discourse related to self, family, social situations, school, work and societal issues.

**Outcome 2:** Refine Spanish oral and written production in response to written materials in Spanish.

**Outcome 3:** Interpret similarities and differences between the cultural practices and perspectives of the target language and those of other cultures.

## TECHNOLOGY

Division: Technology and Engineering

## Degrees and Certificates

Autonomous Systems Development Associate in Science Degree (p. 465)

## Courses

### TECH 080 F Federal Aviation Administration Drone Pilot Test Preparation 1 Unit

18 hours lecture per term. This course reviews and prepares students to take the Federal Aviation Administration's initial aeronautical knowledge test, and help complete FAA Form 8710-13 for a remote pilot certificate, through lecture, discussion and individual flying of drones. This course will help guide students on basic aeronautics and operations as they pertain to drone piloting.

### TECH 081 F Technical Mathematics I 3 Units

54 hours lecture per term. This course covers the use of elementary algebra, geometry, and right triangle trigonometry in the solution of practical problems related to trade and technical areas. This course emphasizes the use of electronic calculators to do the computation. (Degree Credit)

### TECH 082 F Technical Mathematics II 3 Units

**Prerequisite(s):** TECH 081 F with a grade of C or better.

54 hours lecture per term. This course covers the study of more advanced algebra, trigonometry, and elementary statistics in the solution of technical problems. This course does not transfer to CSU. (Degree Credit)

### TECH 088 F Technical Science 3 Units

54 hours lecture per term. This is a course in the fundamental principles of physics, mechanics, heat, light, and strength of materials as applied to practical shop problems. (Degree Credit)

### TECH 108 F Manufacturing Processes 3 Units

54 hours lecture per term. This course is a general overview course which gives an insight into manufacturing processes and develops an appreciation of the latest manufacturing techniques, materials, as well as skills used in the metal, plastic, and other manufacturing industries. This course also reviews engineering materials and manufacturing processes from the viewpoint of the manufacturer and designer perspective. (CSU) (Degree Credit)

- TECH 127 F Industrial Safety** **2 Units**  
36 hours lecture per term. This course will cover the basics of safety as it applies to all majors in Technology Education and Engineering. It will include scope, history, objectives, responsibility, and organization of safety as it relates to common industrial equipment and processes. Various OSHA standards and regulations will be covered including general industry regulations such as 29 CFR 1910.(CSU) (Degree Credit)
- TECH 131 F Basic Electricity and Basic Electronics** **2 Units**  
18 hours lecture and 54 hours lab per term. This course provides the student with introductory knowledge of electricity and electronics to prepare for further studies in entertainment technology. This course involves lecture, discussion, and project-based learning projects. This course is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)
- TECH 132 F Basics of Electric Motor Controls** **2 Units**  
*Prerequisite(s):* TECH 131 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course provides the student with introductory knowledge of electric motor controls and systems to prepare for further studies in entertainment technology. This course involves lecture, discussion, and project-based learning projects. This course is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)
- TECH 135 F Introduction to Programmable Logic Controllers** **2 Units**  
*Prerequisite(s):* TECH 131 F with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This course introduces the technical theater student to PLC technology utilized in the entertainment industry in both theater and theme parks. This career technical education course involves lecture, discussion, and project-based learning and is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)
- TECH 136 F Computer Integrated Manufacturing and Advanced PLC** **3 Units**  
*Prerequisite(s):* TECH 135 F, with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course explores advanced technologies in programmable logic controllers for the entertainment industry with focus on theater show control systems and system integration, set up and troubleshooting. This career technical education course involves, lecture, discussion, and project based learning and is required of all theme park technician certificate students. (CSU) (Degree Credit)
- TECH 137 F Electronic Instrumentation and Networking** **2 Units**  
*Prerequisite(s):* TECH 131 F and TECH 136 F, with a grade of C or better.  
18 hours lecture and 54 hours lab per term. This entertainment industry technology course explores process control, measurements, and data transmission. It includes hands-on project work, troubleshooting, and applied theme park and entertainment workplace situations. This course is required of all Theme Park Technician students. (CSU) (Degree Credit)
- TECH 138 F Electronic Instrumentation and Networking II** **2 Units**  
*Prerequisite(s):* TECH 137 F with a grade of C or better  
*Advisory:* TECH 131 F  
18 hours lecture and 54 hours lab per term. This capstone course builds on the knowledge acquired in TECH 137 F to develop advanced competencies in electronic show control, instrumentation, networking for the entertainment industry and theme parks. This course is required of Theme Park CTE certificate students. (CSU) (Degree Credit)
- TECH 150 F Basic Drone Piloting** **2 Units**  
36 hours lecture and 9 hours lab per term. This course will train students on the principles, guidelines and regulations regarding effective piloting of unmanned aerial vehicles. Safety and ethics associated with drone flight as well as the law will also be stressed. (Degree Credit) (CSU)
- TECH 151 F Applied Drone Piloting** **3 Units**  
36 hours lecture and 54 hours lab per term. In this course, students will learn the basics of piloting an unmanned aerial system, or drone, and how it can be applied in their preferred career (Administration of Justice, Construction, Cinematography, Environmental Science, Geography, Journalism, Photography, Physical Education, Real Estate, Welding, and many others). Students will gain industry-specific experience with UAS. (CSU) (Degree Credit)
- TECH 155 F Applied Drone Lab** **2 Units**  
*Prerequisite(s):* CIS 201 F or ENGR 105 F or TECH 131 F.  
*Advisory:* CIS 201 F or ENGR 105 F or TECH 131 F. 18 hours lecture and 54 hours lab per term. In this course, students will learn the basics of unmanned systems and how they work. Students will create a functioning aerial, terrestrial or submersible system. (Degree Credit) (CSU)
- TECH 158 F Advanced Drone Piloting Skills** **2 Units**  
*Prerequisite(s):* TECH 150 F or TECH 151 F, with a grade of C or better.  
18 hours lecture and 54 hours lab per term. In this course, students will learn advanced drone piloting techniques including multiple drone operations, field operations, night flying, first person view (FPV) piloting, and others. (CSU) (Degree Credit)
- TECH 159 F Counter Drone Operations** **2 Units**  
36 hours lecture per term. In this course, students will learn the principles and techniques regarding counter drone operations for identification and security. Regulations and laws regarding drone operations will be covered. (CSU) (Degree Credit)
- TECH 160 F Infrared Thermography** **2 Units**  
*Advisory:* TECH 150 F.  
36 hours lecture per term. This course focuses on how thermography is used for a variety of conditions including monitoring/predictive maintenance and identification. Students will learn how to collect, interpret and analyze infrared data by using a drone and aerial imaging. (CSU) (Degree Credit)
- TECH 165 F Aerial Mapping and Photogrammetry** **3 Units**  
45 hours lecture and 27 hours lab per term. This course introduces students to the skills in data acquisition, data processing techniques for mapping and by using Pix4D. Students will learn principles of Unmanned Aerial System (UAS) and how to use them to acquire data, create mapping images, point clouds, overlays, and 3D meshes. (CSU) (Degree Credit)
- TECH 199 F Technology and Engineering: Independent Study I** **1-3 Units**  
54-162 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent lab research problems with staff supervision may be approved. Projects with written reports or outside reading with written reports may be required. (CSU) (UC review required.) (Degree Credit)
- TECH 299 F Technology and Engineering Independent Study II** **1-3 Units**  
54-162 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent lab research problems with staff supervision may be approved. Project with written report or outside reading with written report is required. (CSU) (UC review required.) (Degree Credit)



# Autonomous Systems Development Associate in Science Degree

Division: Technology and Engineering

## Requirements

PROGRAM CODE: 2S38300

The **Autonomous Systems Development Associate in Science Degree** is designed to develop the skills necessary to facilitate transfer to a university and provide a comprehensive understanding of autonomous systems. Students seeking a degree in engineering or areas related to Autonomous Systems Technology may pursue careers in industries such as manufacturing, defense, agriculture, surveying, medical, automotive, power, communications and many more. In order to be well prepared for upper division curriculum at a university in technical fields, students should complete as many courses as possible that relate to future job and career prospects. This degree requires a total of 26-30 units.

Code	Title	Units
<b>Required Courses (20-21 units):</b>		
CIS 212 F	Robotic Programming	3
ENGR 110 F	Introduction to Engineering	3
ENGR 203 F	Electric Circuits	4
ENGR 203LF	Electric Circuits Lab	1
MACH 101 F	Introduction to Machine Tools (formerly MACH 091 F)	5
TECH 150 F	Basic Drone Piloting	2-3
or TECH 151 F	Applied Drone Piloting	
TECH 155 F	Applied Drone Lab	2
<b>Restricted Electives (6-9 units):</b>		
CIS 201 F	Introduction to Python Programming	3
DRAF 944 F	Solidworks	3
ENGR 105 F	Engineering CAD	4
MACH 102 F	Intermediate Machine Tools (formerly MACH 092 F)	5
MACH 150 F	CNC Programming Using Mastercam (formerly MACH 050 F)	3
MATH 151 F	Calculus I (formerly MATH 150AF)	4
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
PHYS 221 F	General Physics I	4
<b>Total Units</b>		<b>26-30</b>

## Program Level Student Learning Outcomes

**Outcome 1:** Design and conduct experiments, as well as to analyze and interpret data.

**Outcome 2:** Analyze and interpret data and compare results with theoretical calculators.

# Theatre Arts (Drama)

Division: Fine Arts

## Faculty

Candice Clasby  
Kevin Clowes  
Timothy Espinosa  
Zachary Harless  
Michael Mueller

## Degrees and Certificates

- Acting and Performance Level 1 Certificate (p. 472)
- Assistant Costume Designer Certificate (p. 473)
- Costume Cutter/Draper Certificate (p. 474)
- Costume Stitcher Certificate (p. 475)
- Costume Wardrobe Certificate (p. 475)
- Lighting Technician Certificate (p. 476)
- Musical Theatre Level I Certificate (p. 476)
- Scenic Artist Certificate (p. 477)
- Sound Technician Certificate (p. 477)
- Stage and Screen Combat Level 1 Certificate (p. 478)
- Stage Management Certificate (p. 479)
- Technical Theatre Certificate (p. 479)
- Theatre Arts (Drama) Associate in Arts Degree (p. 480)
- Theatre Arts Associate in Arts Degree for Transfer (p. 481)
- Theme Park Technician Certificate (p. 482)
- Theme Park Technology Specialist Certificate (p. 483)

## Courses

### THEA 072 F Introduction to Movement and Performance Skills for Musical Theatre **1 Unit**

18 hours lecture and 18 hours lab per term. This course provides an introduction to the techniques and skills necessary for the creation and execution of dance for musical theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

### THEA 073 F Beginning Movement and Performance Skills for Musical Theatre **1 Unit**

**Prerequisite(s):** THEA 072 F with a grade of C or better  
18 hours lecture and 18 hours lab per term. Students will learn beginning level techniques and skills for the creation and execution of dance for Musical Theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

### THEA 074 F Intermediate Movement and Performance Skills for Musical Theatre **1 Unit**

**Prerequisite(s):** THEA 073 F with a grade of C or better  
18 hours lecture and 18 hours lab per term. In this course, students will learn intermediate techniques and skills necessary for the creation and execution of dance for Musical Theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

**THEA 075 F Theatrical City Tours: New York****2 Units**

18 hours lecture and 54 hours lab per term. This course features theatrical city tours to New York City and offers a study of current, classical, and musical plays at Broadway and off-Broadway theaters. Students will travel from Orange County to New York City and spend a week experiencing the New York theatre scene and the "Big Apple". Approximate cost for travel, accommodations and theatre tickets is \$1800.

**THEA 076 F Theatrical City Tours: London****2 Units**

18 hours lecture and 54 hours lab per term. This course features theatrical city tours to London and Stratford-upon-Avon, England and offers a study of current, classical, and musical plays. Students will travel from Los Angeles to London, England and spend a week experiencing the London theatre scene and the English countryside. Approximate cost for travel, accommodations and theatre tickets is \$2400.

**THEA 090 F Introduction to Advanced Topics in Theatre Technology****2-6 Units**

18-54 hours lecture and 18-54 hours lab per term. This course is designed to meet the various needs of technical theatre areas that require advanced training and provide professional growth for persons employed in Technical Theatre. This course will be offered in modules of advanced topics. (Degree Credit)

**THEA 091 F Video and Scenic Projection for the Theatre****2 Units**

18 hours lecture and 54 hours lab per term. This course provides an overview of the use of video and projections and their practical applications for use in the theatre. (Degree Credit)

**THEA 092 F Automated Scenery for the Theatre****2 Units**

18 hours lecture and 54 hours lab per term. This course provides an overview of the use of automated scenery systems and their practical applications for use in the theatre. (Degree Credit)

**THEA 093 F Rigging for the Theatre****1 Unit**

54 hours lab per term. This course provides an overview of rigging systems and their practical applications for use in the theatre. (Degree Credit)

**THEA 094 F Systems Maintenance and Troubleshooting for Theatre****2 Units**

18 hours lecture and 54 hours lab per term. This course provides an overview of the maintenance and troubleshooting of theatrical systems. (Degree Credit)

**THEA 100 F Introduction to the Theatre****3 Units**

54 hours lecture per term. This course is designed for those students who wish to explore more thoroughly the art of theatrical performance with special attention given to all the contributing elements. This course examines all areas of theatre production through lecture, demonstration, lab participation, small-group discussion, guest performers, and speakers. This course prepares the student for other course offerings in the theatre curriculum. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: THTR 111)

**THEA 104 F Introduction to Theatre Appreciation****3 Units**

Pass/No Pass or Letter Grade option. 36 hours lecture and 54 hours lab per term. This course is designed to be a study of the combined elements of contemporary theatre through examination of audience/performer relationships and the organization of theatrical production personnel. This course involves the study of current and classical plays, with special emphasis on dramatic analysis and cultural significance. Mandatory attendance at selected group of live theatrical productions is required. Approximate cost of theatre tickets is \$150-225. (Degree Credit) (CSU) (UC) AA GE, CSU GE, IGETC (C-ID: THTR 112)

**THEA 105 F Musical Theatre History****3 Units**

54 hours lecture per term. This course explores the uniquely American art form that is Musical Theatre. From its early development in the colonial period to the present time, emphasis will be placed on the chronological examination of various musical theatre productions. Students will learn how the composers, librettists, lyricists, choreographers, directors and designers contributed to the formation and the popularity of musical theatre, as it exists today. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**THEA 106 F Beginning Principles of Playwriting****3 Units**

54 hours lecture per term. This class introduces students to the elements of writing a play for the stage. Topics include dramatic structure, dramatic action, the relationship between dialogue and action, characterization, setting, theme, and point of view. Students will be assigned writing exercises culminating in a one-act play. Students will be expected to act in and direct other students' scenes. (CSU) (Degree Credit) AA GE

**THEA 108 F Multicultural Perspectives in American Theatre****3 Units**

54 hours lecture per term. This course provides students with critical perspectives on race and gender to engage with Indigenous, Latinx, Black, Asian and LGBTQIA+ theatre within the American cultural landscape as well as the global diaspora. In this introductory class, students will read and engage with contemporary plays that represent and complicate the rich variety of diverse perspectives within America and abroad. This course will explore the genesis of the contemporary Multicultural Theatre landscape, the cultural positionality into which a particular play places itself, and the socio-political climate in which these plays were created. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**THEA 109 F Modern Dramatic Literature****3 Units**

54 hours lecture per term. This course involves the analysis and research of contemporary dramatic literature. Through the examination of dramaturgical structure, thematic presentation, character development and production design requirements, students will explore how analysis and research can aid in the transforming of a script into a theatrical experience. This course includes play readings, lectures, discussions and student reports. Field trips may be required outside regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: THTR 114)

**THEA 121 F Movement for Actors****3 Units**

36 hours lecture and 54 hours lab per term. This course explores movement as an actor's tool to enhance the physical ability to communicate on stage, focusing on physical awareness, movement improvisation and characterization with concentration on structure, organization, and control of time, space, energy, and sound. Emphasis will be placed on the integration of verbal and non-verbal forms of communication as means to inform and illuminate text. The goal is to achieve the fullest range and clarity of physical and emotional expression of the body as it moves in relation to the surrounding space. Field trips may be required outside of class times. (CSU) (UC) (Degree Credit)

**THEA 122 F Improvisation for Television, Film and Theatre****2 Units**

18 hours lecture and 54 hours lab per term. This course involves the principles and techniques of improvisational acting designed to increase the actor's creativity, problem solving, collaboration and performance skills. This course also develops student awareness of the importance of the cooperative dynamics of theatre, television and film and the value of the individual actor's creative process as well as emphasizing the individual performance, ensemble work and the development of the actor's physical, vocal, and emotional instrument as it relates to performance. (CSU) (Degree Credit)

**THEA 123 F Acting Techniques****3 Units**

36 hours lecture and 72 hours lab per term. This course involves the study of contemporary acting techniques based on the Stanislavsky system of acting and is designed as an introductory course for students interested in acting. (CSU) (UC) (Degree Credit)

**THEA 127 F Oral Interpretation****3 Units**

54 hours lecture per term. This course explores the fundamentals of effective oral presentation before an audience. It includes voice study and diction for the purposes of developing effective reading and correct habits of speech and it develops an appreciation of literature through a literary genre-based approach to oral expression and dramatic analysis. This course is recommended for students interested in teaching, broadcasting, public speaking, and voice-over work. Field trips may be required outside of regularly-scheduled class times. (Degree Credit) (CSU) (UC) AA GE, CSU GE (C-ID: COMM 120)

**THEA 129 F Voice for the Actor****3 Units**

54 hours lecture per term. This course includes the academic study and practical application of the efficient and effective use of the speaking voice, particularly in meeting the unique demands of acting for the stage. Along with an introduction to the International Phonetic Alphabet, emphasis in physical relaxation, breathing techniques, vocal expression, and articulation of general American speech will be covered with attention placed on the individual needs of each student. Focus will be placed on exercises designed to build awareness and adjust breath, diction, and conscious control of speech function. The theories and principles of the course will be applied through written assignments, oral performances, and vocal exercises done in class and at home. (CSU) (UC) (Degree Credit)

**THEA 130 F Acting Workshop****3 Units**

**Advisory:** An audition or interview will be conducted for the purpose of assigning performance roles and technical positions.

54 hours lecture and 108 hours lab per term. This course is a continuation of acting fundamentals with increased emphasis on the application of the principles and theories of creating acting. Additional performance and technical support work in production areas is required. (Degree Credit) (CSU) (UC) (C-ID: THEA 191)

**THEA 131 F Theatre Workshop****1-3 Units**

**Advisory:** An audition or interview will be conducted for the purpose of assigning performance roles and technical positions.

54-162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course provides the lab exploration of student and faculty directing, acting, design, promotion, and technical support work for a live theatrical production. (CSU) (Degree Credit)

**THEA 132 F Beg Resident Theatre Company****0.5-3 Units**

27-162 hours lab per term. This course involves the beginning study and practical development of new and experimental plays for D-Fest or Director's Fest. Students enrolling in this course will serve as playwrights, dramaturges, actors, technicians and production assistants. An audition or interview will be conducted by student directors for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

**THEA 134 F Beginning Theatre Practicum (formerly THEA 133 F)****1-2 Units**

54-108 hours lab per term. This course provides the study and lab exploration of all aspects of theatre production, culminating in a series of public performances in the large proscenium theatre. Additional hours may be required for technical, dress rehearsals, and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)

**THEA 135 F Resident Theatre Company****0.5-3 Units**

27-162 hours lab per term. In this course, students will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

**THEA 136 F Touring Theatre Productions: Rehearsal and Performance****3 Units**

**Advisory:** An audition or interview will be conducted for the purpose of assigning performance roles and technical positions

162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course presents the rigorous requirements of a touring theatrical production. Students are given the opportunity to participate in one or more activities of the production company including acting, directing, stage managing, design, costuming, lighting, scenery, sound, properties and make up. The company will travel locally, nationally, and internationally depending on the year and circumstances. (CSU) (Degree Credit)

**THEA 137 F Introduction to Summer Theatre Workshop****3 Units**

162 hours lab per term. This course involves the introduction to the study and lab exploration of all aspects of theatre production culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purpose of assigning performance roles and technical positions. This course is only offered during summer intersession. (CSU) (UC) (Degree Credit)

**THEA 139 F Beginning Musical Theatre Concert Production****1 Unit**

54 hours lab per term. This course involves the beginning study and exploration of all aspects of musical theatre concert production, culminating in a series of public and touring performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)

**THEA 141 F Introduction to Technical Theatre****4 Units**

54 hours lecture and 54 hours lab per term. This course involves the study and execution of technical theatre principles. Through project-based learning, students will learn the theatrical design and technical practices that apply to scenery, lighting, sound, costumes, make up, properties and scene painting. (Degree Credit) (CSU) (UC)

**THEA 143 F Stagecraft****4 Units**

54 hours lecture and 54 hours lab per term. This course involves the study and execution of theatrical scenery with emphasis on construction, drafting, tools, materials, and their relationship to the design process. Students enrolling in this course will be given hands on practical experience in all the practical aspects of designing scenery for the theater. (Degree Credit) (CSU) (UC) (C-ID: THTR 171)

- THEA 146 F Scene Painting** **3 Units**  
**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.  
 Concurrent 36 hours lecture and 54 hours lab per term. This course provides an introduction to, and continued development of, professional scenic artist techniques as they apply to the painting of scenery for the performing arts. This course will include use of brush, roller, spray gun, texturing, rock background, wood graining, wallpaper, masonry, scenic drops and other scene painting techniques. (CSU) (UC) (Degree Credit)
- THEA 148 F Introduction to Theatre Crafts Lab (formerly THEA 142 F)** **1-2 Units**  
 54-108 hours lab per term. This course is an introduction to the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop introductory level skills in technical theatre. (CSU) (UC) (Degree Credit)
- THEA 151 F Properties: Design and Construction** **3 Units**  
**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.  
 Concurrent 36 hours lecture and 54 hours lab per term. This course introduces the student to the processes and skill-sets that are used on a daily basis in the world of stage properties. This course involves the study and execution of property construction, research methods, upholstery, molding and casting, as well as the creation of stage food, animals and stage weaponry. This course is also intended to orient students to the aspects of properties as they relate to a properties master and a properties artisan. (CSU) (Degree Credit)
- THEA 152 F Beginning Theatre Crafts Lab** **1-2 Units**  
**Prerequisite(s):** THEA 148 F with a grade of C or better  
 54-108 hours lab per term. This course covers beginning construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop beginning level skills in technical theatre. (CSU) (UC) (Degree Credit)
- THEA 153 F Introduction to Stage Crew Activity (formerly THEA 149 F)** **0.5-3 Units**  
 27-162 hours lab per term. This course is an introduction to the practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (C-ID: THTR 192)
- THEA 155 F Beginning Summer Theatre Workshop** **3 Units**  
**Prerequisite(s):** THEA 137 F with a grade of C or better  
 162 hours lab per term. This course involves the beginning study and lab exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. (CSU) (UC) (Degree Credit).
- THEA 156 F Intermediate Summer Theatre Workshop** **3 Units**  
**Prerequisite(s):** THEA 155 F with a grade of C or better  
 162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. This course involves the intermediate study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)
- THEA 157 F Advanced Summer Theatre Workshop** **3 Units**  
**Prerequisite(s):** THEA 156 F with a grade of C or better  
 162 hours lab per term. This course involves the advanced study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. (CSU) (UC) (Degree Credit)
- THEA 158 F Introduction to Director's Practicum** **0.5-3 Units**  
 27-162 hours lab per term. This course is the introductory laboratory exploration in acting and technical theatre as it pertains to student directed one-act productions. Actors and technicians will work collaboratively with student directors culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning roles and technical positions. (CSU) (Degree Credit)
- THEA 159 F Beg Stage Crew Activity** **0.5-3 Units**  
**Prerequisite(s):** THEA 153 F with a grade of C or better  
 27-162 hours lab per term. This course involves the beginning practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (CSU) (UC) (C-ID: THTR 192)
- THEA 160 F Introduction to Sound Technology** **3 Units**  
**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.  
 36 hours lecture and 54 hours lab per term. This course introduces the student to sound technology for the theatre with emphasis placed on the physical properties of sound and the audio equipment used to bring sound to the stage and the concert hall. (CSU) (Degree Credit) AA GE
- THEA 161 F Sound Reinforcement Techniques** **2 Units**  
**Prerequisite(s):** THEA 160 F with a grade of C or better.  
 Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better. 18 hours lecture and 54 hours lab per term. This course is designed to give the student understanding and working knowledge of both the science of sound reinforcement and the practical application of audio equipment for theatrical events, concerts and other public events. (CSU) (Degree Credit) AA GE
- THEA 162 F Sound Design for the Theatre** **2 Units**  
**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.  
 18 hours lecture and 54 hours lab per term. This course develops the students' understanding and working knowledge of sound design principles and practices for the theatre. Project based learning provides the student with an introduction to audio equipment and an understanding of the craft and process of sound design. (CSU) (Degree Credit) AA GE

**THEA 170 F Beginning Theatrical Lighting (formerly THEA 144 F) 3 Units**  
**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course involves the beginning study and execution of stage lighting with emphasis on equipment, control, color and their relationship to lighting design for the theatre. (CSU) (UC) (Degree Credit)

**THEA 171 F Beginning Theatrical Costuming and Design (formerly THEA 145 F) 3 Units**

**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.

Concurrent 36 hours lecture and 54 hours lab per term. This course is an introduction to basic theatrical costuming. This course is designed to teach the student about costume design, costume history, costume construction, mask making, fabric modification and the working of a wardrobe crew as it applies to the entertainment industry. This course will culminate in a final project that reflects the student's creativity. (Degree Credit) (CSU) (UC) (C-ID: THTR 174)

**THEA 172 F Stage Makeup (formerly THEA 147AF) 3 Units**

**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of C or better.

Concurrent 36 hours lecture and 54 hours lab per term. This course includes instruction and lab experience in all phases of theatrical makeup. Old age, character, fantasy, look-alike, stylized, historical period styles, facial hair, corrective as well as non-human styles of makeup and their color and application theory are covered in detail. (Degree Credit) (CSU) (UC) (C-ID: THTR 174)

**THEA 176 F Beginning Playwright's Practicum 0.5-3 Units**

**Prerequisite(s):** THEA 135 F with a grade of C or better

27-162 hours lab per term. This course involves the study and practical development on a beginning level, of new and experimental plays. Students enrolling in this course will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview is required for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

**THEA 177 F Beginning Director's Practicum 0.5-3 Units**

**Prerequisite(s):** THEA 225 F with a grade of C or better.

27-162 hours lab per term. This course is the beginning study of the laboratory exploration of student-directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning roles and technical positions. (CSU) (Degree Credit)

**THEA 178 F Beginning Musical Theatre Production 0.5-3 Units**

27-162 lab hours per term. This course involves the beginning study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)

**THEA 180 F Beginning Principles of Acting 3 Units**

**Corequisite(s):** THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better.

36 hours lecture and 54 hours lab per term. This course is an introduction to the theatre elements that relate directly to performing onstage, including rehearsal and performance techniques, stage movement, vocal techniques, stage terminology and script analysis. (Degree Credit) (CSU) (UC) (C-ID: THTR 151)

**THEA 181 F Intermediate Principles of Acting 3 Units**

**Prerequisite(s):** THEA 180 F with a grade of C or better

Concurrent Corequisite: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F with a grade of C or better. 36 hours lecture and 54 hours lab per term. This course features an in-depth study of Intermediate Principles of Acting with emphasis on the applications of stylistic acting techniques for contemporary drama. Individual exercises and scene work based in Strasberg, Meisner, Uta Hagen, Viewpoints, Suzuki, and Adler acting techniques are explored. (Degree Credit) (CSU) (UC) (C-ID: THTR 152)

**THEA 182 F Advanced Principles of Acting I 3 Units**

**Prerequisite(s):** THEA 181 F with a grade of C or better

36 hours lecture and 54 hours lab per term. This course is a continuation of Intermediate Principles of Acting with emphasis on the applications of stylistic techniques for the classics. Individual exercises and scene work in Greek/Roman, Elizabethan, Restoration, Farce, Commedia dell'arte through the exploration of the modern era Chekov, Ibsen, Strindberg and Shaw. (CSU) (UC) (Degree Credit)

**THEA 183 F Advanced Principles of Acting II 3 Units**

**Prerequisite(s):** THEA 181 F with a grade of C or better

36 hours lecture and 72 hours lab per term. This course features in-depth study and practice of acting skills with increased emphasis on the application of the principles and theory of creative acting. Public performance of dramatic literature is required. (CSU) (UC) (Degree Credit)

**THEA 184 F Beginning Musical Theatre I (formerly THEA 125 F and THEA 186 F) 3 Units**

**Prerequisite(s):** Audition required.

Corequisites: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of C or better. 36 hours lecture and 72 hours lab per term. This course is an introductory exploration of beginning musical theatre techniques with an emphasis on contemporary musical theatre from 1864 to present day. Individual exercises in acting, movement and voice as related to contemporary musical theatre are explored. An audition or interview is required for the purposes of assigning solos and group performance roles. Field trips may be required outside of regularly-scheduled class times. (CSU) (UC) (Degree Credit)

**THEA 185 F Beginning Musical Theatre II (formerly THEA 138 F and THEA 187 F) 3 Units**

**Prerequisite(s):** THEA 184 F with a grade of C or better

Concurrent Corequisites: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F. 36 hours lecture and 72 hours lab per term. This course is a continuation of Beginning Musical Theatre Techniques with emphasis on the applications of stylistic techniques for musical theatre ranging from 1895 to 1964. Individual exercises in acting, movement and voice as related to Early Broadway, Jazz Age, Golden Age, and Sondheim are explored. An audition or interview is required for the purposes of assigning solos and group performance roles. (CSU) (UC) (Degree Credit)

**THEA 188 F Introduction to Movement and Performance Techniques for Musical Theatre 1 Unit**

**Prerequisite(s):** THEA 184 F with a grade of C or better  
54 hours lab per term. This course offers an introductory performance experience focusing on styles of body movement as it relates to musical theatre stage productions. The fundamentals of musical theatre movement from 1865 to 1964 will be reviewed, including ballet, jazz and tap. Concepts of the history of movement as it relates to early musical theatre will also be explored. (CSU) (Degree Credit)

**THEA 189 F Beginning Movement and Performance Techniques for Musical Theatre 1 Unit**

**Prerequisite(s):** THEA 188 F with a grade of C or better  
54 hours lab per term. This course offers a beginning level performance experience focusing on styles of body movement as it relates to contemporary musical theatre stage productions from 1964 to present day. The fundamentals of musical theatre movement will be reviewed, including jazz, ballet, tap, lyrical, contemporary jazz, modern, and hip hop. Continued concepts of the history of contemporary musical theatre choreography as it relates to the musical stage will also be explored. (CSU) (Degree Credit)

**THEA 190 F Auditioning for Musical Theatre 3 Units**

**Prerequisite(s):** THEA 284 F with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course offers an in-depth performance experience in the art of the musical theatre audition and callback. A weekly "Business of the Theatre" Lab includes headshot, resume, website, demo reel development and other topics related to branding and marketing oneself as a professional musical theatre performer. (CSU) (Degree Credit)

**THEA 191 F Beginning Musical Theatre Ensemble Voice 1 Unit**

**Corequisite(s):** THEA 184 F with a grade of C or better.  
54 hours lab per term. This course offers a beginning level performance experience with an emphasis on the development of vocal and musicianship skills fundamental for traditional music theatre singing. Providing a study of basic vocal techniques, this course explores tone production, breath control, pronunciation, and choice of traditional music theatre song literature. (CSU) (Degree Credit)

**THEA 192 F Beginning Applied Private Voice Instruction for Musical Theatre 1 Unit**

**Prerequisite(s):** THEA 185 F and THEA 291 F, with a grade of C or better  
Concurrent Corequisite: THEA 284 F with a grade of C or better. 18 hours lecture per term. This course offers a beginning performance experience in individual applied voice instruction and interpretation of musical theatre literature. (CSU) (Degree Credit)

**THEA 196HF Honors Creative Arts - Theatre 3 Units**

54 hours lecture and 18 hours lab per term. This Honors-enhanced course explores the nature of creativity through exposure to the performing arts, dance, literature and the fine arts. Students will make independent investigation into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students are required to attend museums, concerts, theatrical and dance performances. Students who receive credit in this course may not receive credit in MUS 196HF or ART 196HF. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

**THEA 197 F Introduction to Stage Combat 3 Units**

36 hours lecture and 54 hours lab per term. This course focuses on learning how to safely and effectively perform moments of violence in the context of scene work from dramatic literature. Students will explore the fundamentals of unarmed and armed stage combat through analysis, practical application, and performance while improving kinesthetic awareness as well as enhancing confidence in heightened dramatic situations. (Degree Credit) (CSU) (UC)

**THEA 198 F Beginning Principles of Stage Combat 3 Units**

**Prerequisite(s):** THEA 197 F with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course builds upon the fundamentals learned in THEA 197 F and focuses on applying previously-acquired skills, as well as integrating new ones, to new weapon styles in the context of scene work from dramatic literature. Students will expand upon armed analysis, practical application and performance while improving kinesthetic awareness and enhancing confidence in heightened dramatic situations. (Degree Credit) (CSU) (UC)

**THEA 200 F Intermediate Principles of Stage and Screen Combat 3 Units**

**Prerequisite(s):** THEA 197 F with a grade of C or better.  
36 hours lecture and 54 hours lab per term. This course builds upon the fundamentals learned in THEA 197 F and focuses on applying previously-acquired skills, as well as integrating new ones, to new weapon styles in the context of scene work from dramatic literature. Students will expand upon armed analysis, practical application, and performance while improving kinesthetic awareness and enhancing confidence in heightened dramatic situations. (CSU) (UC) (Degree Credit)

**THEA 201 F Advanced Principles of Stage and Screen Combat 2-3 Units**

**Prerequisite(s):** THEA 200 F with a grade of C or better.  
18 hours and 54-108 hours lab per term. This course builds upon the principles learned in THEA 200 F and focuses on applying previously-acquired skills, as well as integrating new ones, to new weapon styles in the context of scene work from dramatic literature, film, and television. Students will expand upon unarmed and armed analysis, practical application, and performance while improving kinesthetic awareness and enhancing confidence in heightened dramatic situations for the stage and screen. (CSU) (Degree Credit)

**THEA 222 F Acting for the Camera 3 Units**

36 hours lecture and 72 hours lab per term. This course encompasses the study and exercise in the special techniques of acting for the motion picture and television cameras. Emphasis will be placed on the audition process for commercials and TV/film technique along with the understanding of the various camera angles, shots, positions and actor behaviors unique to acting before a camera. (CSU) (UC) (Degree Credit)

**THEA 225 F Stage Directing 3 Units**

**Prerequisite(s):** THEA 180 F with a grade of C or better  
Concurrent Corequisite: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F, with a grade of C or better. 36 hours lecture and 54 hours lab per term. This course is a study of the background and techniques of the director in theatre, with an emphasis on practical experience in directing through class projects. (CSU) (UC) (Degree Credit)

**THEA 233 F Intermediate Theatre Practicum 1-2 Units**

**Prerequisite(s):** THEA 134 F with a grade of C or better  
54-108 hours lab per term. This course provides the intermediate study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances in the large proscenium theatre. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals, and performances. (CSU) (Degree Credit)

- THEA 234 F Intermediate Experimental Theatre** 2 Units  
108 hours lab per term. This course involves the intermediate study and laboratory exploration of student directed one-act products culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)
- THEA 235 F Experimental Theatre** 2 Units  
*Prerequisite(s):* THEA 135 F with a grade of C or better  
108 hours lab per term. This course involves the study and laboratory exploration of student or faculty directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)
- THEA 239 F Intermediate Musical Theatre Concert Production** 1 Unit  
*Prerequisite(s):* THEA 139 F with a grade of C or better  
54 hours lab per term. This course involves the intermediate study and exploration of all aspects of musical theatre concert production, culminating in a series of public and touring performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)
- THEA 244 F Intermediate Theatrical Lighting** 3 Units  
*Prerequisite(s):* THEA 170 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course involves the further study and execution of stage lighting with in-depth emphasis on equipment, control, color and their relationships to lighting design for the theatre. (CSU) (UC) (Degree Credit)
- THEA 246 F Intermediate Theatrical Costuming** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course develops intermediate skills in theatrical costuming including costume design for multiple venues and styles, historical research methods, costume construction, fabric identification and fabric modifications as it applies to the entertainment industry. (CSU) (UC) (Degree Credit)
- THEA 249 F Intermediate Stage Crew Activity** 0.5-3 Units  
*Prerequisite(s):* THEA 159 F with a grade of C or better  
27-162 hours lab per term. This course covers intermediate practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (CSU) (UC) (C-ID: THTR 192)
- THEA 250 F Advanced Stage Crew Activity** 0.5-3 Units  
*Prerequisite(s):* THEA 249 F with a grade of C or better  
27-162 hours lab per term. This course covers advanced practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. Open Entry/Open Exit. (Degree Credit) (CSU) (UC) (C-ID: THTR 192)
- THEA 252 F Intermediate Theatre Crafts Lab** 1-2 Units  
*Prerequisite(s):* THEA 152 F with a grade of C or better  
54-108 hours lab per term. This course is an intermediate experience in the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop intermediate skills in technical theatre. (CSU) (UC) (Degree Credit)
- THEA 253 F Advanced Theatre Crafts Lab** 1-2 Units  
*Prerequisite(s):* THEA 252 F with a grade of C or better  
54-108 hours lab per term. This course provides advanced students experience in the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop advanced skills in technical theatre. (CSU) (UC) (Degree Credit)
- THEA 256 F 16-18th Century Theatrical Costume Construction** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the 16th through 18th centuries and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 257 F 19th Century Theatrical Costume Construction** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the nineteenth century and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 258 F 20th Century Theatrical Costume Construction** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the 20th century and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 259 F Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)** 3 Units  
*Prerequisite(s):* THEA 171 F with a grade of C or better  
36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to historical periods before the 16th century and their application to present-day costume construction and design. (CSU) (UC) (Degree Credit)
- THEA 265 F Theatre Management** 2 Units  
36 hours lecture per term. This course is designed to teach the business of show business in educational, community, and professional theater. Emphasis is placed on the contributions of the producer, production manager, and artistic director and the impact they have on theatre operations. This course is required of all students who are interested in management positions for the Theatre Arts Department productions. (CSU) (Degree Credit)
- THEA 266 F Stage Management** 3 Units  
54 hours lecture per term. This course involves the study and the practical application of the practices of the Stage Manager as they pertain to the theatrical production process. Emphasis is placed on the duties, responsibilities and procedures from pre-production to post-production. This course is required of all students who are interested in stage management positions for the Theatre Arts Department productions. (CSU) (Degree Credit)

**THEA 276 F Intermediate Playwright's Practicum 0.5-3 Units**

**Prerequisite(s):** THEA 176 F with a grade of C or better  
27-162 hours lab per term. This course involves the study and practical development on an intermediate level, of new and experimental plays. Students enrolling in this course will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

**THEA 277 F Intermediate Director's Practicum 0.5-3 Units**

**Prerequisite(s):** THEA 177 F with a grade of C or better  
27-162 hours lab per term. This course is an intermediate study of the laboratory exploration of student-directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

**THEA 278 F Intermediate Musical Theatre Production 0.5-3 Units**

**Prerequisite(s):** THEA 178 F with a grade of C or better  
27-162 lab hours per term. Additional hours for technical rehearsals, dress rehearsals and performances may be required. This course involves the intermediate study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

**THEA 279 F Advanced Musical Theatre Production 0.5-3 Units**

**Prerequisite(s):** THEA 278 F with a grade of C or better.  
27-162 hours lab per term. This course involves the advanced study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)

**THEA 280 F Advanced Director's Practicum 0.5-3 Units**

This course is an advanced study of the laboratory exploration of student directed one-act productions and D-Fest or Director's Festival culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

**THEA 284 F Intermediate Musical Theatre I (formerly THEA 226 F and THEA 286 F) 3 Units**

**Prerequisite(s):** THEA 185 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course features an in-depth study of Intermediate Musical Theatre Techniques with emphasis on the applications of the Pop/Rock genre of musical theatre performance. Individual exercises in acting, movement and voice as related to pop/rock in the 50's, 60's, 70's, and 80's. Contemporary Pop/Rock, Country, Bluegrass, and Hip Hop genres are explored. An audition or interview will be conducted for the purposes of assigning performance roles. (CSU) (UC) (Degree Credit)

**THEA 285 F Intermediate Musical Theatre II (formerly THEA 238 F and THEA 287 F) 3 Units**

**Prerequisite(s):** THEA 284 F with a grade of C or better  
36 hours lecture and 72 hours lab per term. This course is a continuation of Intermediate Musical Theatre Techniques with an emphasis on script and score analysis. Scene study as it relates to The Jazz Age, The Golden Age, Sondheim, Contemporary Musical Theatre, and Pop/Rock Musicals will be explored. An audition or interview will be conducted for the purpose of assigning solos and group performance roles. (CSU) (UC) (Degree Credit)

**THEA 290 F Theatrical Production Techniques 1-3 Units**

**Prerequisite(s):** THEA 130 F or THEA 131 F or THEA 143 F or THEA 146 F or THEA 151 F or THEA 157 F or THEA 162 F or THEA 172 F or THEA 189 F or THEA 233 F or THEA 235 F or THEA 244 F or THEA 246 F or THEA 250 F or THEA 253 F or THEA 276 F or THEA 277 F or THEA 278 F or THEA 285 F, with a grade of C or better.

**Advisory:** Auditions or interviews will be conducted for the purposes of assigning performance roles and technical positions.  
54-162 hours lab per term. This course involves the practical application of theatrical production techniques through the assignment of performance, production and design, director or management positions. (CSU) (Degree Credit)

**THEA 291 F Intermediate Musical Theatre Ensemble Voice 1 Unit**

**Prerequisite(s):** THEA 191 F with a grade of C or better.  
**Corequisite(s):** THEA 185 F with a grade of C or better.  
Concurrent 54 hours lab per term. This course offers an intermediate level performance experience with an emphasis on the continued development of vocal and musicianship skills fundamental for contemporary musical theatre singing. Providing a continued study of basic vocal techniques, this course explores tone production, breath control, pronunciation, and choice of contemporary musical theatre song literature. (CSU) (Degree Credit)

**THEA 292 F Intermediate Applied Private Voice Instruction for Musical Theatre 1 Unit**

**Prerequisite(s):** THEA 284 F and THEA 291 F, with a grade of C or better.  
Concurrent Corequisite: THEA 285 F with a grade of C or better. This course offers an intermediate performance in individual applied voice instruction and interpretation of musical theatre literature. (CSU) (Degree Credit)

**THEA 298 F Theatre Arts Internship 2-4 Units**

**Advisory:** Completion of 10-12 units, with a grade of C or better, of any of the theatre courses listed in the technical theatre certificates  
18 lecture and 60-180 hours supervised unpaid internship or 75-255 hours paid internship per term. This course is designed to enable the Theatre Arts student to understand and demonstrate competence in a professional theatrical work environment through the combination of the application of extended classroom learning and the interaction of a professional theatrical supervisor. It is each student's responsibility to obtain their own internship opportunity. (CSU) (Degree Credit)

**THEA 299 F Theatre Arts Independent Study 1-3 Units**

54-162 hours independent study per term. This course is designed for self-directed students who wish to increase their knowledge and experience in theatre. The instructor and student create a learning contract and schedule of weekly conferences and projected completion dates. (CSU) (Degree Credit)

## Acting and Performance Level 1 Certificate

Division: Fine Arts

### Requirements

The **Acting and Performance Level 1 Certificate** is designed to prepare students for entry-level performance competency and employment in regional theatre, television, film, theme parks and education. Students will integrate voice, mind, and body techniques toward character development, explore and engage with multiple professional training methodologies, generate a repertory of performance material for auditions, and produce professional grade resumes and headshots to



forward career advancement. This certificate requires between 19.5 and 22.5 units.

Code	Title	Units
<b>Required Core Courses (15 units):</b>		
THEA 100 F	Introduction to the Theatre	3
THEA 121 F	Movement for Actors	3
THEA 129 F	Voice for the Actor	3
THEA 180 F	Beginning Principles of Acting	3
THEA 181 F	Intermediate Principles of Acting	3
<b>Restricted Electives (1-3 units):</b>		<b>1-3</b>
THEA 108 F	Multicultural Perspectives in American Theatre	3
THEA 109 F	Modern Dramatic Literature	3
THEA 122 F	Improvisation for Television, Film and Theatre	2
THEA 127 F	Oral Interpretation	3
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	1-3
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	1-2
THEA 197 F	Introduction to Stage Combat	3
THEA 222 F	Acting for the Camera	3
THEA 299 F	Theatre Arts Independent Study	1-3
<b>Total Units</b>		<b>16-18</b>

## Program Student Learning Outcomes

**Outcome 1:** Identify and apply specific skills, knowledge, and creativity for professional development and employment in theatre, film, and television.

**Outcome 2:** Demonstrate the ability to select, rehearse and perform solo and scene material as well as "cold read" provided materials.

**Outcome 3:** Apply and integrate analytical skills through written script analysis as well as written and verbal evaluation of peer performances and of other theatrical productions.

**Outcome 4:** Analyze and apply vocal and physical techniques toward the creation of character for the purpose of theatrical storytelling.

## Assistant Costume Designer Certificate

### Requirements

PROGRAM CODE: 2C19660

The **Assistant Costume Designer Certificate** provides the student with expertise in order to assist the Costume Designer in costuming for film, television, theme park entertainment and theater. The Assistant Costume Designer should be able to create patterns for costumes, assemble costumes suitable for the entertainment industry, illustrate fashion and utilize design skills. This certificate is designed to provide the student with a course of study leading to certification and employment in the entertainment industry as an Assistant Costume Designer. The Assistant Costume Designer certificate program requires the completion of 38.5-48 units of which 29.5-37 units are in required courses and the remaining 9-11

units must be chosen from the restricted electives below. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (29.5-37 units):</b>		
ART 139 F	Fashion Sketching	2
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 209 F	Draping (formerly FASH 209AF)	2
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
THEA 100 F	Introduction to the Theatre	3
THEA 130 F	Acting Workshop	.5-3
or THEA 131 F	Theatre Workshop	
or THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	
or THEA 178 F	Beginning Musical Theatre Production	
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5-3
or THEA 159 F	Beg Stage Crew Activity	
or THEA 249 F	Intermediate Stage Crew Activity	
or THEA 250 F	Advanced Stage Crew Activity	
THEA 171 F	Beginning Theatrical Costuming and Design (formerly THEA 145 F)	3
THEA 172 F	Stage Makeup (formerly THEA 147AF)	3
THEA 246 F	Intermediate Theatrical Costuming	3
THEA 256 F	16-18th Century Theatrical Costume Construction	3
or THEA 257 F	19th Century Theatrical Costume Construction	
or THEA 258 F	20th Century Theatrical Costume Construction	
THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)	3
<b>Restricted Electives (9-11 units):</b>		<b>9-11</b>
ART 180 F	Rendering	3
ART 186 F	Beginning Life Drawing	3
FASH 188 F	Apparel Production	2
FASH 190 F	Pattern Grading	2
FASH 205 F	Tailoring (formerly FASH 205AF)	2
FASH 206 F	Textiles	4
FASH 299 F	Fashion Industry Internship	2-4
THEA 075 F	Theatrical City Tours: New York	2
THEA 076 F	Theatrical City Tours: London	2
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	1-3
THEA 159 F	Beg Stage Crew Activity	0.5-3
THEA 233 F	Intermediate Theatre Practicum	1-2
THEA 249 F	Intermediate Stage Crew Activity	0.5-3
THEA 250 F	Advanced Stage Crew Activity	0.5-3
THEA 256 F	16-18th Century Theatrical Costume Construction	3

THEA 257 F	19th Century Theatrical Costume Construction	3
THEA 258 F	20th Century Theatrical Costume Construction	3
THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)	3
<b>Total Units</b>		<b>38.5-48</b>

## Program Student Learning Outcomes

**Outcome 1:** Determine whether to pull, purchase or build costumes based upon the needs of the script, the show's budget and the time and workforce available.

**Outcome 2:** Create and maintain a show "bible".

**Outcome 3:** Construct a complete costume from several historical time periods.

**Outcome 4:** Create custom patterns to match an actor's measurements.

**Outcome 5:** Organize and load in costumes for a theatrical production.

**Outcome 6:** Design costumes suitable for the stage.

## Costume Cutter/Draper Certificate

### Requirements

PROGRAM CODE: 2C19663

The **Costume Cutter/Draper Certificate** provides the student with training to create patterns, cut and assemble costumes for the entertainment industry. Students also receive training in the basic theatrical production process. This certificate is designed to provide the student with a course of study leading to certification and employment in the entertainment industry as a Costume Cutter/Draper. This certificate requires the completion of 24-31 units. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (18-23 units):</b>		
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 108 F	Flat Pattern Methods and Design I (formerly FASH 108AF)	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
FASH 209 F	Draping (formerly FASH 209AF)	2
THEA 130 F or THEA 131 F or THEA 134 F or THEA 178 F	Acting Workshop <sup>1</sup> Theatre Workshop Beginning Theatre Practicum (formerly THEA 133 F) Beginning Musical Theatre Production	.5-3
THEA 171 F	Beginning Theatrical Costuming and Design (formerly THEA 145 F)	3
THEA 246 F	Intermediate Theatrical Costuming <sup>1</sup>	3
THEA 256 F or THEA 257 F or THEA 258 F	16-18th Century Theatrical Costume Construction <sup>1</sup> 19th Century Theatrical Costume Construction 20th Century Theatrical Costume Construction	3

or THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)	
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F) <sup>1</sup>	0.5-3
or THEA 159 F or THEA 249 F or THEA 250 F	Beg Stage Crew Activity Intermediate Stage Crew Activity Advanced Stage Crew Activity	

<b>Restricted Electives (6-8 units):</b>		<b>6-8</b>
FASH 088 F	CAD for Apparel	2
THEA 109 F	Modern Dramatic Literature	3
FASH 188 F	Apparel Production	2
FASH 190 F	Pattern Grading	2
FASH 206 F	Textiles	4
FASH 242 F	Fashion History - The Evolution of Dress, Culture and Style (formerly Fashion History of Costume)	3
FASH 975 F	Patternmaking: Collections	2
FASH 976 F	Men's Patternmaking	2
THEA 076 F	Theatrical City Tours: London	2
THEA 130 F	Acting Workshop <sup>1</sup>	3
THEA 131 F	Theatre Workshop <sup>1</sup>	1-3
THEA 159 F	Beg Stage Crew Activity <sup>1</sup>	0.5-3
THEA 178 F	Beginning Musical Theatre Production <sup>1</sup>	0.5-3
THEA 249 F	Intermediate Stage Crew Activity <sup>1</sup>	0.5-3
THEA 250 F	Advanced Stage Crew Activity <sup>1</sup>	0.5-3
THEA 256 F	16-18th Century Theatrical Costume Construction <sup>1</sup>	3
THEA 257 F	19th Century Theatrical Costume Construction <sup>1</sup>	3
THEA 258 F	20th Century Theatrical Costume Construction <sup>1</sup>	3
THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F) <sup>1</sup>	3
<b>Total Units</b>		<b>24-31</b>

<sup>1</sup> This course cannot be credited for both restricted and required units.

## Program Student Learning Outcomes

**Outcome 1:** Analyze a costume design sketch/rendering to determine its patterning needs.

**Outcome 2:** Pattern a basic muslin/toile per the measurements of an actor.

**Outcome 3:** Create a custom muslin/toile for an actor.

**Outcome 4:** Create a historical pattern based upon the costume designer's sketch and the actor's measurements.

**Outcome 5:** Adapt a commercial pattern to match a designer's costume sketch.

# Costume Stitcher Certificate

## Requirements

PROGRAM CODE: 2C19661A

The **Costume Stitcher Certificate** provides the student with training in specialized sewing techniques and other skills necessary to build a variety of costumes required by the entertainment industry. Students also receive training in basic theatrical production practices. This certificate is designed to provide students with a course of study leading to certification and employment in the entertainment industry as a Costume Stitcher. This certificate requires the completion of 20-27 units. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (14-19 units):</b>		
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
THEA 130 F	Acting Workshop	.5-3
or THEA 131 F	Theatre Workshop	
or THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	
or THEA 178 F	Beginning Musical Theatre Production	
THEA 171 F	Beginning Theatrical Costuming and Design (formerly THEA 145 F)	3
THEA 246 F	Intermediate Theatrical Costuming	3
THEA 256 F	16-18th Century Theatrical Costume Construction <sup>1</sup>	3
or THEA 257 F	19th Century Theatrical Costume Construction	
or THEA 258 F	20th Century Theatrical Costume Construction	
or THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)	
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F) <sup>1</sup>	0.5-3
or THEA 159 F	Beg Stage Crew Activity	
or THEA 249 F	Intermediate Stage Crew Activity	
or THEA 250 F	Advanced Stage Crew Activity	
<b>Restricted Electives (minimum of 6 units):</b>		
FASH 045 F	Swim and Active Wear	2
FASH 085 F	Bridal and Special Occasion Wear	2
FASH 090 F	Creative Serging - Overlock Machine	2
THEA 159 F	Beg Stage Crew Activity <sup>1</sup>	0.5-3
FASH 188 F	Apparel Production	2
FASH 205 F	Tailoring (formerly FASH 205AF)	2
THEA 249 F	Intermediate Stage Crew Activity <sup>1</sup>	0.5-3
THEA 250 F	Advanced Stage Crew Activity <sup>1</sup>	0.5-3
THEA 256 F	16-18th Century Theatrical Costume Construction <sup>1</sup>	3
THEA 257 F	19th Century Theatrical Costume Construction <sup>1</sup>	3
THEA 258 F	20th Century Theatrical Costume Construction <sup>1</sup>	3

THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F) <sup>1</sup>	3
<b>Total Units</b>		<b>20-27</b>

<sup>1</sup> This course cannot be credited for both restricted and required units.

## Program Student Learning Outcomes

**Outcome 1:** Analyze if and how a garment can be altered to meet the needs of an actor.

**Outcome 2:** Create historical corsets and underpinnings.

**Outcome 3:** Demonstrate the application of theatrical closures including hook and eye tape, zippers and machine button holes.

**Outcome 4:** Construct a complete garment from a historical time period using a commercial pattern.

**Outcome 5:** Construct a period costume using a custom pattern with no written instructions.

# Costume Wardrobe Certificate

## Requirements

PROGRAM CODE: 2C18759

The **Costume Wardrobe Certificate** provides the student with the practical knowledge and experience necessary to work backstage preparing, changing and maintaining costumes before, during and after performances. Students are trained in basic costume techniques as well as basic theatrical production practices. This certificate is designed to provide the student with a course of study leading to certification and employment in the entertainment industry working in the area of Wardrobe. This program requires the completion of 15-20 units of which 9-14 units are in required courses and the remaining 6 units must be chosen from the restrictive electives below. All course work must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (9-14 units):</b>		
FASH 101 F	Basic Sewing Techniques (formerly Clothing I)	2
THEA 130 F	Acting Workshop <sup>1</sup>	.5-3
or THEA 131 F	Theatre Workshop	
or THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	
or THEA 178 F	Beginning Musical Theatre Production	
THEA 171 F	Beginning Theatrical Costuming and Design (formerly THEA 145 F)	3
THEA 246 F	Intermediate Theatrical Costuming	3
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5-3
or THEA 159 F	Beg Stage Crew Activity	
or THEA 249 F	Intermediate Stage Crew Activity	
or THEA 250 F	Advanced Stage Crew Activity	
<b>Restricted Electives (6 units):</b>		
FASH 201 F	Fashion Sewing (formerly Clothing II)	2
THEA 130 F	Acting Workshop <sup>1</sup>	3
THEA 131 F	Theatre Workshop <sup>1</sup>	1-3

THEA 159 F	Beg Stage Crew Activity <sup>1</sup>	0.5-3
THEA 178 F	Beginning Musical Theatre Production <sup>1</sup>	0.5-3
THEA 233 F	Intermediate Theatre Practicum	1-2
THEA 249 F	Intermediate Stage Crew Activity <sup>1</sup>	0.5-3
THEA 250 F	Advanced Stage Crew Activity <sup>1</sup>	0.5-3
THEA 256 F	16-18th Century Theatrical Costume Construction	3
THEA 257 F	19th Century Theatrical Costume Construction	3
THEA 258 F	20th Century Theatrical Costume Construction	3
THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)	3
THEA 172 F	Stage Makeup (formerly THEA 147AF)	3
<b>Total Units</b>		<b>15-20</b>

<sup>1</sup> This course cannot be credited for both restricted and required units.

## Program Student Learning Outcomes

**Outcome 1:** Analyze a script to determine the costume needs of actor including the how and when of fast changes.

**Outcome 2:** Assist an actor with a fast change.

**Outcome 3:** Solve and take care of minor costume repairs during the run of a show.

**Outcome 4:** Determine the proper methods for cleaning costumes and execute them.

**Outcome 5:** Organize other students in striking a theatrical production.

## Lighting Technician Certificate

### Requirements

PROGRAM CODE: 2C18746

The **Lighting Technician Certificate** is designed to prepare the student for occupational competency as a Lighting Technician in educational, community and resident theatre venues as well as theme parks, television and motion picture studios. This certificate requires a total of 28-31 units. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (16 units):</b>		
ART 110 F	Introduction to Art	3
THEA 100 F	Introduction to the Theatre	3
THEA 141 F	Introduction to Technical Theatre	4
THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F) <sup>1</sup>	3
THEA 244 F	Intermediate Theatrical Lighting <sup>1</sup>	3
NOTE: THEA 170 F and THEA 244 F require concurrent enrollment in any level of Stage Crew Activity.		
<b>Required Lab Courses (2 units):</b>		
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5
THEA 159 F	Beg Stage Crew Activity	0.5
THEA 249 F	Intermediate Stage Crew Activity	0.5

THEA 250 F	Advanced Stage Crew Activity	0.5
<b>Required Production Courses (5-7 units):</b>		
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	1-3
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	1-2
THEA 178 F	Beginning Musical Theatre Production	0.5-3
THEA 233 F	Intermediate Theatre Practicum	1-2
THEA 278 F	Intermediate Musical Theatre Production	0.5-3
<b>Restricted Electives (5-6 units):</b>		
DANC 120 F	Dance History	3
DRAF 171 F	Fundamentals of Drafting	2
IDES 210 F	Fundamentals of Lighting	3
MUS 116 F	Music Appreciation	3
MUS 118 F	Introduction to Opera	3
THEA 094 F	Systems Maintenance and Troubleshooting for Theatre	2
<b>Total Units</b>		<b>28-31</b>

<sup>1</sup> Note: THEA 170 F and THEA 244 F require concurrent enrollment in any level of Stage Crew Activity.

## Program Student Learning Outcomes

**Outcome 1:** Identify and explain the documentation required to implement the lighting for a theatrical production.

**Outcome 2:** Operate and evaluate theatrical lighting equipment by participating in the practices of hanging, circuiting and focusing for actual productions.

**Outcome 3:** Identify, explain and evaluate the safe operation of lighting equipment associated with theatrical productions.

**Outcome 4:** Relate and explain the processes inherent in the theatrical lighting design process.

**Outcome 5:** Identify, describe and define terminology commonly associated with theatrical lighting.

**Outcome 6:** Analyze and evaluate the lighting requirements of a play or musical.

## Musical Theatre Level I Certificate

### Requirements

PROGRAM CODE: 2C08422

The **Musical Theatre Certificate Level I Certificate (formerly Musical Theatre Certificate)** is designed to prepare the student for entry-level performance competency in the field of Musical Theatre and lead to specific areas of employment in musical theater production as well as television, theme parks, cruise ships and education. Related career opportunities include, but are not limited to performer, dancer, singer, director and choreographer. This certificate requires a total of 18.5 - 21.5 units.

Code	Title	Units
<b>Required Dance Courses (4 units):</b>		
DANC 140 F	Introduction to Ballet	2

DANC 141 F	Ballet I - Beginning Ballet	2
<b>Required Music Courses (2 units):</b>		
THEA 191 F	Beginning Musical Theatre Ensemble Voice	1
THEA 291 F	Intermediate Musical Theatre Ensemble Voice	1
<b>Required Theatre Arts Musical Theatre Courses (6 units):</b>		
THEA 184 F	Beginning Musical Theatre I (formerly THEA 125 F and THEA 186 F)	3
THEA 185 F	Beginning Musical Theatre II (formerly THEA 138 F and THEA 187 F)	3
<b>Required Theatre Arts Courses (3.5 units):</b>		
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	.5
THEA 180 F	Beginning Principles of Acting <sup>1</sup>	3
<b>Restricted Electives (performance courses) - select one course (1-3 units):</b>		
THEA 139 F	Beginning Musical Theatre Concert Production	1
THEA 178 F	Beginning Musical Theatre Production <sup>2</sup>	3
<b>Restricted Electives - select one course (2-3 units):</b>		
THEA 075 F	Theatrical City Tours: New York	2
THEA 105 F	Musical Theatre History	3
<b>Total Units</b>		<b>18.5-21.5</b>

<sup>1</sup> Requires concurrent enrollment of .50 units of THEA 153 F.

## Program Student Learning Outcomes

**Outcome 1:** Explain, discriminate and relate the professional work ethic of Musical Theatre.

**Outcome 2:** Identify and apply specific skills, knowledge, and creativity for professional development and employment in Musical Theatre.

**Outcome 3:** Demonstrate the ability to perform dance sequences.

**Outcome 4:** Describe and demonstrate rhythm and note reading skills in the sight-singing of vocal exercises.

**Outcome 5:** Apply and integrate analytical skills through written script analysis, written and verbal evaluation of peer performances and of live theatrical productions.

## Scenic Artist Certificate

### Requirements

PROGRAM CODE: 2C18747A

The **Scenic Artist Certificate** is designed to prepare the student for occupational competency as a Scenic Artist in educational, community and resident theatre venues as well as theme parks, television and motion picture studios. This certificate program requires a total of 31 units of which 21 units required and 4 units required lab courses. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (21 units):</b>		
ART 118 F	Color Theory	3
ART 180 F	Rendering	3

ART 182 F	Basic Drawing	3
THEA 100 F	Introduction to the Theatre	3
THEA 141 F	Introduction to Technical Theatre	4
THEA 146 F	Scene Painting <sup>1</sup>	3
THEA 148 F	Introduction to Theatre Crafts Lab (formerly THEA 142 F)	2
<b>Required Lab Courses (4 units):</b>		
THEA 152 F	Beginning Theatre Crafts Lab	2
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5
THEA 159 F	Beg Stage Crew Activity	0.5
THEA 249 F	Intermediate Stage Crew Activity	0.5
THEA 250 F	Advanced Stage Crew Activity	0.5
THEA 252 F	Intermediate Theatre Crafts Lab	2
THEA 253 F	Advanced Theatre Crafts Lab	2
<b>Restricted Electives (6 units):</b>		
ART 110 F	Introduction to Art	3
ART 189 F	Beginning Painting	3
ART 197 F	Mural and Faux Painting	3
THEA 151 F	Properties: Design and Construction	3
<b>Total Units</b>		<b>31</b>

<sup>1</sup> Note: THEA 146 F requires concurrent enrollment in THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F.

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate and evaluate general drawing and painting skills.

**Outcome 2:** Demonstrate, formulate and assess the principles of color theory and paint mixing.

**Outcome 3:** Discriminate and evaluate the relationships of pigment color to lighting, costuming, and scenery.

**Outcome 4:** Differentiate, formulate and select the appropriate paints and finishes as needed for various scenic materials.

**Outcome 5:** Compare, contrast and choose the appropriate brushes, rollers, and applicators as needed for various scenic materials.

**Outcome 6:** Identify, explain and evaluate the safe operation of scene painting equipment associated with theatrical productions.

## Sound Technician Certificate

### Requirements

PROGRAM CODE: 2C18748A

The **Sound Technician Certificate** is designed to prepare the student for occupational competency as a sound technician in educational, community and resident theatres as well as theme parks, television and motion picture studios. This certificate program requires a total of 32-34 units. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (19 units):</b>		
MUS 101 F	Music Fundamentals	3
MUS 108 F	Introduction to Music Technology	2

THEA 100 F	Introduction to the Theatre	3
THEA 141 F	Introduction to Technical Theatre	4
THEA 160 F	Introduction to Sound Technology	3
THEA 161 F	Sound Reinforcement Techniques	2
THEA 162 F	Sound Design for the Theatre	2
<b>Required Lab Courses (2 units):</b>		
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5
THEA 159 F	Beg Stage Crew Activity	0.5
THEA 249 F	Intermediate Stage Crew Activity	0.5
THEA 250 F	Advanced Stage Crew Activity	0.5
<b>Required Production Courses (6-7 units):</b>		<b>6-7</b>
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	2
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	2
THEA 178 F	Beginning Musical Theatre Production	2
THEA 233 F	Intermediate Theatre Practicum	2
THEA 278 F	Intermediate Musical Theatre Production	2
<b>Restricted Electives (5-6 units):</b>		<b>5-6</b>
CRTV 122 F	Audio Production Techniques	3
MUS 124 F	Recording Lab I - Beginning Techniques	3
MUS 224 F	Recording Studio II - Intermediate Techniques	3
THEA 094 F	Systems Maintenance and Troubleshooting for Theatre	2
THEA 137 F	Introduction to Summer Theatre Workshop	3
THEA 155 F	Beginning Summer Theatre Workshop	3
<b>Total Units</b>		<b>32-34</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate an understanding of basic technical theatre terminology as it relates to sound/audio.

**Outcome 2:** Identify and demonstrate the practical aspects of safe and effective use of tools associated with sound/audio for the theatre.

**Outcome 3:** Identify and demonstrate the different types of drawings for theatrical sound/audio.

**Outcome 4:** Identify and explain collaboration and concept as it relates to the sound/audio design process.

## Stage and Screen Combat Level 1 Certificate

Division: Fine Arts

### Requirements

PROGRAM CODE: 2C40976

The **Stage and Screen Combat Level 1 Certificate** is designed to prepare the student for entry-level performance competency and employment in the field of stage combat and stunts, with specific areas of employment in regional theatre, television, film, theme parks and education. Students will integrate voice, mind, and body techniques toward character development,

train and employ a variety of techniques specific to armed and unarmed staged violence, integrate choreography into the context of scripted scene work, and be adjudicated for proficiency and recognition by an internationally recognized organization (Society of American Fight Directors). This certificate requires a total of 18.5-22.5 units.

Code	Title	Units
<b>Required Courses (12 units):</b>		
THEA 180 F	Beginning Principles of Acting	3
THEA 181 F	Intermediate Principles of Acting	3
THEA 197 F	Introduction to Stage Combat	3
THEA 198 F	Beginning Principles of Stage Combat	3
<b>Courses to be taken concurrently (2.5-4.5 units):</b>		<b>2.5-4.5</b>
THEA 153 F & THEA 141 F	Introduction to Stage Crew Activity (formerly THEA 149 F) and Introduction to Technical Theatre	1-7
or THEA 143 F	Stagecraft	
or THEA 146 F	Scene Painting	
or THEA 148 F	Introduction to Theatre Crafts Lab (formerly THEA 142 F)	
or THEA 151 F	Properties: Design and Construction	
or THEA 152 F	Beginning Theatre Crafts Lab	
or THEA 160 F	Introduction to Sound Technology	
or THEA 161 F	Sound Reinforcement Techniques	
or THEA 162 F	Sound Design for the Theatre	
or THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F)	
or THEA 171 F	Beginning Theatrical Costuming and Design (formerly THEA 145 F)	
or THEA 172 F	Stage Makeup (formerly THEA 147AF)	
or THEA 244 F	Intermediate Theatrical Lighting	
or THEA 246 F	Intermediate Theatrical Costuming	
or THEA 252 F	Intermediate Theatre Crafts Lab	
or THEA 253 F	Advanced Theatre Crafts Lab	
or THEA 256 F	16-18th Century Theatrical Costume Construction	
or THEA 257 F	19th Century Theatrical Costume Construction	
or THEA 258 F	20th Century Theatrical Costume Construction	
or THEA 259 F	Pre-16th Century Theatrical Costume Construction (formerly THEA 255 F)	
or THEA 265 F	Theatre Management	
or THEA 266 F	Stage Management	
<b>Restricted Electives (4-6 units):</b>		<b>4-6</b>
THEA 121 F & THEA 100 F	Movement for Actors and Introduction to the Theatre	1-6
or THEA 108 F	Multicultural Perspectives in American Theatre	
or THEA 122 F	Improvisation for Television, Film and Theatre	
or THEA 127 F	Oral Interpretation	
or THEA 129 F	Voice for the Actor	
or THEA 130 F	Acting Workshop	
or THEA 131 F	Theatre Workshop	
or THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	
or THEA 222 F	Acting for the Camera	

or THEA 299 F Theatre Arts Independent Study

**Total Units** 18.5-22.5

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate the ability to work safely and effectively with multiple weapon disciplines both in rehearsal and performance on stage and in front of the camera.

**Outcome 1:** Research, analyze, and apply historically martial techniques into safely repeatable actions that contribute to effective storytelling.

**Outcome 3:** Apply and integrate analytical skills through written script analysis as well as written and verbal evaluation of peer performances and of other theatrical productions.

**Outcome 4:** Demonstrate a working knowledge of terminology, stage/set etiquette, and safety.

## Stage Management Certificate

### Requirements

PROGRAM CODE: 2C18749A

The **Stage Management Certificate** is designed to prepare the student for occupational competency as a Stage Manager in educational, community and resident theatre venues as well as theme park, television and motion picture studios. This certificate program requires a total of 37 units of which 31 units are in required courses. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (31 units):</b>		
ART 110 F	Introduction to Art	3
THEA 100 F	Introduction to the Theatre	3
THEA 141 F	Introduction to Technical Theatre	4
THEA 160 F	Introduction to Sound Technology <sup>1</sup>	3
THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F) <sup>1</sup>	3
THEA 265 F	Theatre Management	2
THEA 266 F	Stage Management	3
<b>Required Stage Crew Activity Courses</b>		
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5
THEA 159 F	Beg Stage Crew Activity	0.5
THEA 249 F	Intermediate Stage Crew Activity	0.5
THEA 250 F	Advanced Stage Crew Activity	0.5
<b>Students are required to fulfill stage management positions for required production courses.</b>		
<i>Select from the following (8 units):</i>		<i>8</i>
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	2
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	2
THEA 233 F	Intermediate Theatre Practicum	2
THEA 178 F	Beginning Musical Theatre Production	3
THEA 278 F	Intermediate Musical Theatre Production	3
<b>Restricted Electives - Select from the following (6 units):</b>		<b>6</b>

BUS 262 F	Principles of Management	3
CIS 111 F	Introduction to Information Systems	4
MUS 116 F	Music Appreciation	3
MUS 118 F	Introduction to Opera	3
THEA 104 F	Introduction to Theatre Appreciation	3
THEA 137 F	Introduction to Summer Theatre Workshop	3
THEA 155 F	Beginning Summer Theatre Workshop	3
THEA 176 F	Beginning Playwright's Practicum	1-2
THEA 276 F	Intermediate Playwright's Practicum	1-2
THEA 177 F	Beginning Director's Practicum	1-2
THEA 277 F	Intermediate Director's Practicum	1-2
<b>Total Units</b>		<b>37</b>

<sup>1</sup> Note: THEA 170 F and THEA 160 F require concurrent enrollment in THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F.

## Program Student Learning Outcomes

**Outcome 1:** Organize and create a prompt book relevant to a theatrical production.

**Outcome 2:** Analyze and evaluate the production requirements of a play or musical.

**Outcome 3:** Design, assemble and evaluate a theatrical play season.

**Outcome 4:** Identify and interpret common themes and purposes in producing a theatrical production.

**Outcome 5:** Evaluate and compare the job descriptions of theatrical production personnel.

**Outcome 6:** Identify and contrast the various theatrical unions and how they relate to a theatrical production.

## Technical Theatre Certificate

### Requirements

PROGRAM CODE: 2C18750A

The **Technical Theatre Certificate** is designed to prepare the student for occupational competency as a theatre technician in educational, community and resident theatre venues as well as theme parks, television and motion picture studios. This certificate program requires a total of 35-38 units. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (17 units):</b>		
THEA 100 F	Introduction to the Theatre	3
THEA 141 F	Introduction to Technical Theatre	4
THEA 143 F	Stagecraft	4
THEA 160 F	Introduction to Sound Technology	3
THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F)	3
<b>Required Theatre Crafts Lab Courses (4 units):</b>		
THEA 148 F	Introduction to Theatre Crafts Lab (formerly THEA 142 F)	2
THEA 152 F	Beginning Theatre Crafts Lab	2
THEA 252 F	Intermediate Theatre Crafts Lab	2

THEA 253 F	Advanced Theatre Crafts Lab	2
<b>Required Stage Crew Activity Courses (2 units):</b>		
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5
THEA 159 F	Beg Stage Crew Activity	0.5
THEA 249 F	Intermediate Stage Crew Activity	0.5
THEA 250 F	Advanced Stage Crew Activity	0.5
<b>Required Production Courses (6-7 units): 6-7</b>		
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	2
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	2
THEA 178 F	Beginning Musical Theatre Production	2
THEA 233 F	Intermediate Theatre Practicum	2
THEA 278 F	Intermediate Musical Theatre Production	2
<b>Restricted Electives (6-8 units): 6-8</b>		
DRAF 171 F	Fundamentals of Drafting	2
THEA 092 F	Automated Scenery for the Theatre	2
THEA 093 F	Rigging for the Theatre	1
THEA 094 F	Systems Maintenance and Troubleshooting for Theatre	2
THEA 146 F	Scene Painting	3
THEA 151 F	Properties: Design and Construction	3
<b>Total Units</b>		<b>35-38</b>

## Program Student Learning Outcomes

**Outcome 1:** Describe and explain technical theatre terminology.

**Outcome 2:** Identify, differentiate and evaluate the unique production aspects of proscenium, thrust, arena and black box configurations.

**Outcome 3:** Identify tools, hardware and equipment associated with the implementation of the various technical theater components.

**Outcome 4:** Illustrate, evaluate and employ the correct, safe and efficient use of tools, hardware and equipment associated with the implementation of the various technical theater components.

**Outcome 5:** Compare and interpret the different types of drawings that theatrical designers produce.

**Outcome 6:** Differentiate and explain the different types of construction techniques used in building theatrical scenery.

## Theatre Arts (Drama) Associate in Arts Degree

### Requirements

PROGRAM CODE: 2A03850

The **Theatre Arts (Drama) Associate in Arts Degree** is designed to prepare students to acquire basic theatrical knowledge and academic skills to either transfer to a four-year academic institution or lead to employment in the specific areas of theater production as well as related areas in television, film, theme parks, education, and management. Related career opportunities include but are not limited to actor, director, costumer, makeup designer, playwright, drama coach, set designer, scenic artist,

sound designer, lighting designer, stage hand, technician, wardrobe, stage manager, production manager, and educator. This degree requires a total of 19-25.5 units.

Code	Title	Units
<b>Required Courses (3 units):</b>		
THEA 100 F	Introduction to the Theatre	3
or THEA 104 F	Introduction to Theatre Appreciation	
or THEA 105 F	Musical Theatre History	
or THEA 108 F	Multicultural Perspectives in American Theatre	
<b>Required Performance Courses (6.5 units): 6.5</b>		
THEA 180 F	Beginning Principles of Acting	3
THEA 181 F	Intermediate Principles of Acting <sup>1</sup>	3
NOTE: THEA 181 F requires completion of THEA 180 F with a grade of C or better.		
<i>Concurrent enrollment in one of the following courses is required for THEA 180 F.</i>		
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5
THEA 159 F	Beg Stage Crew Activity	0.5
THEA 249 F	Intermediate Stage Crew Activity	0.5
THEA 250 F	Advanced Stage Crew Activity	0.5
<b>Required Electives - Production Courses (2-3 units): 2-3</b>		
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	2
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	2
THEA 176 F	Beginning Playwright's Practicum	2
THEA 177 F	Beginning Director's Practicum	2
THEA 178 F	Beginning Musical Theatre Production	2
THEA 233 F	Intermediate Theatre Practicum	2
THEA 276 F	Intermediate Playwright's Practicum	2
THEA 277 F	Intermediate Director's Practicum	2
THEA 278 F	Intermediate Musical Theatre Production	2
<b>Restricted Electives - Technical Theatre Courses (3.5-4 units): 3.5-4</b>		
THEA 141 F	Introduction to Technical Theatre	4
THEA 143 F	Stagecraft	4
THEA 146 F	Scene Painting	3
THEA 160 F	Introduction to Sound Technology	3
THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F)	3
THEA 171 F	Beginning Theatrical Costuming and Design (formerly THEA 145 F)	3
THEA 172 F	Stage Makeup (formerly THEA 147AF)	3
<i>Concurrent enrollment in one of the following courses is required for THEA 146 F, THEA 160 F, THEA 170 F, THEA 171 F, THEA 172 F:</i>		
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	.5
THEA 159 F	Beg Stage Crew Activity	.5
THEA 249 F	Intermediate Stage Crew Activity	.5
THEA 250 F	Advanced Stage Crew Activity	.5
<b>Restricted Electives (4-9 units selected from at least two of the categories below): 4-9</b>		

*Performance courses recommended for actors (1-3 units):*



THEA 072 F	Introduction to Movement and Performance Skills for Musical Theatre	1
THEA 073 F	Beginning Movement and Performance Skills for Musical Theatre	1
THEA 074 F	Intermediate Movement and Performance Skills for Musical Theatre	1
THEA 121 F	Movement for Actors	3
THEA 123 F	Acting Techniques	3
THEA 135 F	Resident Theatre Company	1
THEA 136 F	Touring Theatre Productions: Rehearsal and Performance	3
THEA 139 F	Beginning Musical Theatre Concert Production	1
THEA 183 F	Advanced Principles of Acting II	3
THEA 184 F	Beginning Musical Theatre I (formerly THEA 125 F and THEA 186 F)	3
THEA 185 F	Beginning Musical Theatre II (formerly THEA 138 F and THEA 187 F)	3
THEA 197 F	Introduction to Stage Combat	3
THEA 198 F	Beginning Principles of Stage Combat	3
THEA 239 F	Intermediate Musical Theatre Concert Production	1
THEA 284 F	Intermediate Musical Theatre I (formerly THEA 226 F and THEA 286 F)	3
THEA 285 F	Intermediate Musical Theatre II (formerly THEA 238 F and THEA 287 F)	3
<i>Production courses recommended for actors and theatre technicians (2-3 units):</i>		
THEA 137 F	Introduction to Summer Theatre Workshop	3
THEA 155 F	Beginning Summer Theatre Workshop	3
THEA 156 F	Intermediate Summer Theatre Workshop	3
THEA 157 F	Advanced Summer Theatre Workshop	3
THEA 235 F	Experimental Theatre	2
<i>Technical Theatre courses recommended for theatre technicians (1-3 units):</i>		
THEA 090 F	Introduction to Advanced Topics in Theatre Technology	2-6
THEA 091 F	Video and Scenic Projection for the Theatre	2
THEA 093 F	Rigging for the Theatre	1
THEA 094 F	Systems Maintenance and Troubleshooting for Theatre	2
THEA 148 F	Introduction to Theatre Crafts Lab (formerly THEA 142 F)	1-2
THEA 151 F	Properties: Design and Construction	3
THEA 152 F	Beginning Theatre Crafts Lab	1-2
THEA 161 F	Sound Reinforcement Techniques	2
THEA 162 F	Sound Design for the Theatre	2
THEA 244 F	Intermediate Theatrical Lighting	3
THEA 246 F	Intermediate Theatrical Costuming	3
THEA 252 F	Intermediate Theatre Crafts Lab	1-2
THEA 253 F	Advanced Theatre Crafts Lab	1-2
THEA 265 F	Theatre Management	2
THEA 266 F	Stage Management	3
THEA 290 F	Theatrical Production Techniques	1-3

THEA 298 F	Theatre Arts Internship	2-4
THEA 299 F	Theatre Arts Independent Study	1-3
<i>Recommended for all theatre arts students (2-3 units):</i>		
THEA 075 F	Theatrical City Tours: New York	2
THEA 076 F	Theatrical City Tours: London	2
THEA 106 F	Beginning Principles of Playwriting	3
THEA 109 F	Modern Dramatic Literature	3
THEA 122 F	Improvisation for Television, Film and Theatre	2
THEA 127 F	Oral Interpretation	3
THEA 129 F	Voice for the Actor	3
THEA 196HF	Honors Creative Arts - Theatre	3
THEA 222 F	Acting for the Camera	3
THEA 225 F	Stage Directing	3

**Total Units** **19-25.5**

## Program Student Learning Outcomes

**Outcome 1:** Analyze and appraise the study and the making of theatre.

**Outcome 2:** Cooperate and participate with others in order to be supportive team players and effective leaders..

**Outcome 3:** Determine and evaluate personal and career goals.

**Outcome 4:** Distinguish and relate effective time management, budget management, and production management skills.

**Outcome 5:** Examine and maintain a balance between creativity and critical judgment.

**Outcome 6:** Illustrate the confidence and skills to "do it right the first time."

**Outcome 7:** Compile and interpret a work ethic that exemplifies "know who you are and do it on purpose."

**Outcome 8:** Measure and perform in a "learn by doing" environment.

## Theatre Arts Associate in Arts Degree for Transfer

### Requirements

**PROGRAM CODE:** 2A31648

The **Associate in Arts Degree in Theater Arts for Transfer**, also called the Theater Arts AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Theater Arts. Ed Code Section 66746-66749 states that students earning the Theater Arts AA-T Degree will be granted priority for admission as a Theater major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of C or better in all major coursework. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better. This degree provides students with an understanding and an appreciation for the art of theater and includes courses in acting, technical theater, rehearsal and performance as well as an introduction to the theater and play analysis. Completion of this curriculum will provide preparation for future theater studies. The Theater Arts AA-T Degree program requires 9

required core courses. An additional 9-10 units are in restricted electives from the categories below as indicated.

The following is required for all AA-T or AS-T degrees, and there are no additional graduation requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (for admissions to CSU, it is necessary that the students meet the "Oral Communications" requirement when using IGETC for AA-T or AS-T).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A P (Pass) grade is an acceptable grade for a course in the major only if the P is defined to be equivalent to a C or better.

Code	Title	Units
<b>Required Core Courses (9 units):</b>		<b>9</b>
THEA 100 F	Introduction to the Theatre	3
THEA 130 F	Acting Workshop <sup>1</sup>	3
or THEA 131 F	Theatre Workshop	
or THEA 178 F	Beginning Musical Theatre Production	
THEA 180 F	Beginning Principles of Acting	3
<b>List A: Select (9-10) units from the following:</b>		<b>9-10</b>
THEA 109 F	Modern Dramatic Literature	3
THEA 143 F	Stagecraft	4
THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F)	3
THEA 171 F	Beginning Theatrical Costuming and Design (formerly THEA 145 F)	3
THEA 172 F	Stage Makeup (formerly THEA 147AF)	3
THEA 181 F	Intermediate Principles of Acting	3
<b>Total Units</b>		<b>18-19</b>

<sup>1</sup> THEA 130 F, THEA 131 F, THEA 178 F are variable unit courses (1-3 units), however THEA 130 F or THEA 131 F or THEA 178 F must be taken for 3 units to satisfy requirements for this THEA AA-T degree.

## Program Student Learning Outcomes

**Outcome 1:** Construct, recognize, and apply criteria for judging the effectiveness and success of a theatrical production.

**Outcome 2:** Demonstrate the appropriate use of stage terminology.

**Outcome 3:** Demonstrate the ability to execute character based motivations, mannerisms, vocal and physical choices as directed.

**Outcome 4:** Demonstrate and employ a professional work ethic in both rehearsals and performances.

**Outcome 5:** Compare and contrast the job responsibilities of all theatrical personnel.

# Theme Park Technician Certificate

Division: Fine Arts

## Requirements

PROGRAM CODE: 2C36819A

The **Theme Park Technician Certificate** is designed to prepare the student for occupational competency as a technician for theme parks. This certificate program requires a total of 22 units of all of which are in required courses. A grade of C or better is required in each course taken.

Code	Title	Units
<b>Required Courses (19 units):</b>		
THEA 091 F	Video and Scenic Projection for the Theatre	2
THEA 093 F	Rigging for the Theatre	1
THEA 094 F	Systems Maintenance and Troubleshooting for Theatre	2
THEA 141 F	Introduction to Technical Theatre	4
THEA 143 F	Stagecraft	4
THEA 160 F	Introduction to Sound Technology <sup>1</sup>	3
THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F) <sup>1</sup>	3
<b>Required State Crew Activity Courses (1 unit):</b>		<b>1</b>
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5-3
THEA 159 F	Beg Stage Crew Activity	0.5-3
THEA 249 F	Intermediate Stage Crew Activity	0.5-3
THEA 250 F	Advanced Stage Crew Activity	0.5-3
<b>Required Production Courses (2 units):</b>		<b>2</b>
THEA 131 F	Theatre Workshop	1-3
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	1-2
THEA 178 F	Beginning Musical Theatre Production	0.5-3
THEA 233 F	Intermediate Theatre Practicum	1-2
THEA 278 F	Intermediate Musical Theatre Production	0.5-3
<b>Total Units</b>		<b>22</b>

<sup>1</sup> Require concurrent enrollment in THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F.

## Program Student Learning Outcomes

**Outcome 1:** Illustrate, evaluate and employ the correct, safe and efficient use of tools, hardware and equipment associated with maintenance and troubleshooting of the various theatrical systems.

**Outcome 2:** Differentiate and explain the different types of drawings associated with maintenance and troubleshooting of the various theatrical systems.

**Outcome 3:** Determine and formulate the correct method for repairing equipment associated with maintenance and troubleshooting of the various theatrical systems.

# Theme Park Technology Specialist Certificate

Division: Fine Arts

## Requirements

PROGRAM CODE: 2C37654

The **Theme Park Technology Specialist Certificate** prepares the student for occupational competency working for theme parks as a technology specialist. Technology specialists perform maintenance, troubleshooting, and repair of advanced theme park ride and entertainment technology, earn competitive salaries, and can work in theme parks across the world. This Certificate requires completion of 39-44 units of which 38 units are in required courses and the remaining 1-6 units must be chosen from the restricted electives below. All courses must be completed with a grade of C or better.

Code	Title	Units
<b>Required Courses (35 units):</b>		
TECH 081 F	Technical Mathematics I	3
TECH 131 F	Basic Electricity and Basic Electronics	2
TECH 132 F	Basics of Electric Motor Controls	2
TECH 135 F	Introduction to Programmable Logic Controllers	2
TECH 136 F	Computer Integrated Manufacturing and Advanced PLC	3
TECH 137 F	Electronic Instrumentation and Networking	2
THEA 091 F	Video and Scenic Projection for the Theatre	2
THEA 092 F	Automated Scenery for the Theatre	2
THEA 093 F	Rigging for the Theatre	1
THEA 094 F	Systems Maintenance and Troubleshooting for Theatre	2
THEA 141 F	Introduction to Technical Theatre	4
THEA 143 F	Stagecraft	4
THEA 160 F	Introduction to Sound Technology	3
THEA 170 F	Beginning Theatrical Lighting (formerly THEA 144 F)	3
<b>Restricted Electives: Stage Crew Activity Lab Courses (.5-3 units):</b>		<b>.5-3</b>
THEA 153 F	Introduction to Stage Crew Activity (formerly THEA 149 F)	0.5-3
THEA 159 F	Beg Stage Crew Activity	0.5-3
THEA 249 F	Intermediate Stage Crew Activity	0.5-3
THEA 250 F	Advanced Stage Crew Activity	0.5-3
<b>Restricted Electives: Capstone Project Courses (.5-3 units):</b>		<b>.5-3</b>
THEA 130 F	Acting Workshop	3
THEA 131 F	Theatre Workshop	1-3
THEA 134 F	Beginning Theatre Practicum (formerly THEA 133 F)	1-2
THEA 178 F	Beginning Musical Theatre Production	0.5-3
THEA 233 F	Intermediate Theatre Practicum	1-2
THEA 278 F	Intermediate Musical Theatre Production	0.5-3
<b>Total Units</b>		<b>36-41</b>

## Program Student Learning Outcomes

**Outcome 1:** Illustrate, evaluate, and employ the correct and safe and efficient use of tools, hardware, and equipment associated with the maintenance and trouble-shooting of various theatrical and theme park systems.

**Outcome 2:** Perform trouble shooting and reporting functions for programmable logic controllers.

**Outcome 3:** Design a regular maintenance and diagnostic plan for various theatrical, theme park ride, and entertainment industry systems.

## Welding

Division: Technology and Engineering

### Faculty

Will Daniel  
Brendon Kirby  
Jordan Maxwell

### Degrees and Certificates

- Welding Technology Certificate (p. 484)

### Courses

**WELD 091AF Industrial Welding Fundamentals** **5 Units**  
54 hours lecture and 108 hours lab per term. This course is designed to introduce the student to a variety of welding processes. Topics will include historical development of welding, the welding industry and its future, applied terms and definitions, methods of application, safety in the welding environment, welding positions, and joint types. Students will develop occupational proficiency using Oxyfuel Welding (OFW), Brazing (TB), Oxyfuel Cutting (OFC), Air Carbon Arc Cutting (CAC-A), and Plasma Cutting (PAC). (Degree Credit)

**WELD 091BF Semi-Automatic Welding Applications** **5 Units**  
**Corequisite(s):** WELD 091AF or WELD 100 F with a grade of C or better.  
54 hours lecture and 108 hours lab per term. This course will cover, with in-depth study, the make-up of constant voltage power sources and semi-automatic wire feed systems. Various methods of metal transfer will be covered, such as spray, globular, short-circuiting, and pulsed spray. Applications will be applied to ferrous and non-ferrous metals of various thicknesses in all axes. Students will become occupationally proficient using Gas Metal Arc Welding (GMAW) on limited thickness material in all axis on plate, Flux Cored Arc Welding (FCAW) on intermediate and unlimited thicknesses in all axis on plate. (Degree Credit)

**WELD 091CF Manual Arc Welding Fundamentals** **5 Units**  
**Corequisite(s):** WELD 091BF with a grade of C or better.  
54 hours lecture and 108 hours lab per term. This course covers the make-up and use of constant current power supplies as found in Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) with alternating current, direct current and pulsed current output variations. Elements of welding design, cost estimations, process selection and related welding symbols also will be covered. Students will gain entry level skills on Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) using ferrous and non-ferrous metals. (Degree Credit)

**WELD 091DF Structural Welding Certification****5 Units****Corequisite(s):** WELD 091CF with a grade of C or better.

54 hours lecture and 108 hours lab per term. This course covers the origination and applications of welding codes, welding procedure qualification, welder qualification tests, weldment evaluation and quality control, visual inspection and preparation for Los Angeles City welding examination. Students will take written and lab tests to qualify as licensed certified welders in compliance with the American Welding Society (AWS) and the Los Angeles Building Code, using Shielded Metal Arc Welding (SMAW) and Flux Core Arc Welding (FCAW) on light gauge and heavy gauge structural steel. (Degree Credit)

**WELD 095 F Welding Skills Lab****0.5-2 Units****Advisory:** Enrollment in any Fullerton College welding course

Open Entry/Open Exit 27-108 hours lab per term. This course offers students the opportunity to further develop their welding skills. One-half unit of credit will be given for each twenty-four hours of class participation. Open entry, variable units. (Degree Credit)

**WELD 096 F Welding Inspection Technology****5 Units**

72 hours lecture and 54 hours lab per term. This course will aid in preparation for the American Welding Society's (AWS) Certified Welding Inspector's (CWI) exam. Fundamentals of visual welding inspection per nationally recognized code applications will be covered. Preparation and qualification of welding procedures and welder qualifications will be discussed. Building code compliance for welding applications will be assessed. Through the usage of weld gauge measurement tools and destructive and nondestructive testing equipment, the student will gain hands-on experience in welding inspection standards. This class is strongly recommended for those entering the fields of quality assurance, inspection, supervision and engineering of welded products. (Degree Credit)

**WELD 098 F Welding Fabrication Technology****2 Units****Prerequisite(s):** WELD 091AF or WELD 100 F, with a grade of C or better.

18 hours lecture and 54 hours lab per term. This course will provide the student with a general understanding of the fundamental methods of welding fabrication used in industry. Fabrication case studies and philosophies will be examined and the net outcome discussed. Students will become familiar with standard mill shapes and materials, jigs and fixtures, methods of layout and fitting, preparation and qualification of welding procedures and welding sequence, cost analysis, and cutting and fastening techniques. This course is strongly recommended for those entering the fields of metal fabrication, quality assurance, inspection, supervision, and engineering of welded products. (Degree Credit)

**WELD 100 F Introduction to Welding (formerly WELD 121AF)****3 Units**

36 hours lecture and 54 hours lab per term. This course emphasizes welding fundamentals and safety used in modern industry. Students in non-welding vocational and transfer areas will be able to gain welding skills needed as a support craft. Process identification, terms and definitions, safety guidelines, and practical applications are included. Students will gain entry level skills with Oxy-acetylene Welding (OAW), Brazing (TB) Shielded Metal Arc Welding (SMAW) and Oxy-acetylene Cutting (OFC). (CSU) (Degree Credit)

**WELD 120 F Gas Shielded Arc Welding****3 Units****Corequisite(s):** WELD 100 F with a grade of C or better.

18 hours lecture and 108 hours lab per term. This course enables students, who expect welding to be an integral part of their vocation, to master necessary manipulative skills in order to obtain job proficiency. Introduction to Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW) and Plasma Arc Cutting (PAC) are covered. Students will gain entry level skills on ferrous and non-ferrous metals using Gas Metal Arc and Gas Tungsten Arc Welding. (CSU) (Degree Credit)

# Welding Technology Certificate

## Requirements

**PROGRAM CODE:** 2C08417A

The **Welding Technology Certificate** is designed to prepare students to apply a variety of welding processes in the workplace. This certificate requires a total of 23-29 units. A grade of C or better is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

Code	Title	Units
<b>Required Courses (18-20 units):</b>		<b>18-20</b>
WELD 100 F	Introduction to Welding (formerly WELD 121AF)	3-5
or WELD 091AF Industrial Welding Fundamentals		
WELD 091BF	Semi-Automatic Welding Applications	5
WELD 091CF	Manual Arc Welding Fundamentals	5
WELD 091DF	Structural Welding Certification	5
<b>Restricted Electives (5-9 units):</b>		<b>5-9</b>
DRAF 101 F	Blueprint Reading for Manufacturing (formerly DRAF 070 F)	2
DRAF 171 F	Fundamentals of Drafting	2
MACH 116 F	Machine Tools	2
METL 192 F	Fundamentals of Metallurgy	3
TECH 081 F	Technical Mathematics I	3
TECH 108 F	Manufacturing Processes	3
TECH 127 F	Industrial Safety	2
WELD 096 F	Welding Inspection Technology	5
WELD 098 F	Welding Fabrication Technology	2
<b>Total Units</b>		<b>23-29</b>

## Program Student Learning Outcomes

**Outcome 1:** Demonstrate one or more of the five core welding processes and applied relevant safety.

**Outcome 2:** Demonstrate code compliance requirements for Welding.

# Faculty and Administration

## -A-

**ABDEL HAQ, MOHAMMAD** – Sociology

B.S., La Roche College, Pittsburgh, Pennsylvania

M.A., California State University, Fullerton

**ABESAMIS, NAOMI** – Director, Student Life and Leadership

B.A., University of California, Riverside

M.B.A., University of Phoenix

M.A., California State Polytechnic University, Pomona

**ABUTIN, ALBERT** – Dean, Enrollment Services

A.A., Fullerton College

A.S., Fullerton College

B.A., California State University, Fullerton

M.S., University of La Verne

Ed.D., University of La Verne

**ADAKAI, ERICKA** - Partnerships and Programs (Interim)

A.A., Antelope Valley College

B.S., California State University, Fullerton

M.S., California State University, Fullerton

**AGUIRRE, CRYSTAL** - Physical Education

A.A., Fullerton College

B.S., California State University, Los Angeles

M.S., Azusa Pacific University

**AGUIRRE, YOLANDA** – Counseling

B.A., California State University, Fullerton

M.A., Chapman University

**ALLEN, MAALA K.** – Biology

B.Sc., University of St. Andrews, United Kingdom

M.S., Yale University

**ALMODOVAR-SOLE, LAURA C.** – Counseling

B.A., University of Puerto Rico

M.A., California State University, Dominguez Hills

**ANDERSON, JANNA K.** – English

B.A., Pepperdine University

M.A., California State University, Fullerton

**ANDRADE, C. DAVID** - Disability Support Services

B.A., University of California, Berkeley

M.S., California State University, East Bay (Hayward)

**ANDRUS, ANGIE** – Sociology

A.A., Fullerton College

B.A., California State University, Fullerton

M.A., California State University, Fullerton

**ANSARI, MOHD** – Chemistry

Ph.D., Indian Institute of Technology, India

**ARELLANO, CRISTINA M.** – Counseling (EOPS/CARE)

B.S., Azusa Pacific University

M.S., University of La Verne

Ed.D., California State University, Fullerton

**ARMAN, NICK** – Veterans Resource Center

A.A., Los Angeles Pierce College

B.A., California State University, Northridge

M.S., California State University, Northridge

Ed.D., Brandman University

**ARRIAZA, CECILIA** – Director, Cadena Cultural and Transfer Center

B.A., University of California, Los Angeles

M.A., University of California, Los Angeles

**ASHENMILLER, JOSHUA** – History

A.B., Princeton University

M.A., University of California, Santa Barbara

Ph.D., University of California, Santa Barbara

**ASSEF, CELIA** – Cosmetology

A.S., Riverside Community College

B.S., Southern Illinois University

**AUSTIN, PHILIP** – Physical Education

A.A., Pasadena City College

B.A., California State University, Dominguez Hills

B.A., University of Hawaii

**AVILES, GREG** – Physical Education

B.S., California State University, Fullerton

M.S., Concordia University, Irvine

**AYON, CARLOS** – Dean, Business and Computer Information Systems

A.A., Fullerton College

B.A., University of California, Los Angeles

M.P.P., University of California, Los Angeles

M.A., University of California, Los Angeles

## -B-

**BABAD, BRUCE** – Music

B.A., Central Washington University, Ellensburg

M.M., California State University, Long Beach

**BAKER, MICHAEL J.** – Anatomy and Physiology

B.S., University of California, Irvine

M.S., California State University, Long Beach

**BALMA, JODI JENKIN** – Political Science

B.A., California State University, Fullerton

M.P.A., California State University, Fullerton

**BANDA, SERGIO A.** – Sociology

M.A., California State University, Fullerton

**BARABAS, LILIANA** – Physics and Astronomy

B.S., University of Bucharest, Romania

M.S., California State University, Long Beach

**BARAJAS, OLIVIA** – Counseling

B.A., University of California, Berkeley

M.S., California State University, Long Beach

**BARSAMIAN, ARAM** – Music

B.M., California State University, Fullerton

M.M., University of Southern California

**BASSI, LISA** – Physical Education

B.S., California Polytechnic University, Pomona

M.A., California State University, Dominguez Hills

**BATTOCLETTE-YOUNG, RENEE** – Fashion

B.F.A., Virginia Commonwealth University  
M.A., California State University, Los Angeles

**BAUM, CHAD** – Physical Education  
B.S., California State University, Fullerton  
M.Ed., Azusa Pacific University

**BEVEC, GINA M.** – Physical Education  
A.A., Fullerton College  
B.S., California State University, Fullerton  
M.Ed., Azusa Pacific University

**BIANCHINO, ANNIE** – Chemistry  
B.S., Brooklyn College  
M.S., University of California, San Diego  
Ph.D., University of California, Los Angeles

**BLANCHE, GISELLE** – Sociology  
B.S., Louisiana State University, Baton Rouge  
M.A., California State University, Fullerton

**BOGAN, MARY** – Reading  
B.A., University of Texas at Dallas  
M.S., California State University, Fullerton

**BONNAND, GEORGE J.** – Machine Tools  
A.A., Orange Coast College  
B.A., California State University, Long Beach  
M.A., California State University, Long Beach

**BOUZA, LAURA A.** – Cinema, Radio and Television  
B.A., University of Buffalo  
M.F.A., California Institute of the Arts

**BOYD, PORSHA** – Counseling  
B.A., Fresno State University  
M.A., National University  
Ed.D., California State University, Northridge

**BROWN, ALEXANDER** – Interim Manager, International Students Center  
B.A., Pepperdine University  
M.S., Cal Baptist University

**BROWN, DAVID** – Library  
B.S., Butler University  
M.L.S., University of Missouri, Columbia

**BUI, MINH** – Mathematics  
B.A., University of California, Los Angeles  
M.A., University of California, Irvine

**BURGER, MARKUS** – Music  
B.A., Conservatory Maastricht, Netherlands  
M.A., Folkwangschule Essen, Germany

**BYRNES, TIMOTHY** – Physical Education  
B.A., California State University, Fullerton  
M.Ed., Azusa Pacific University

## – C –

**CADENA, M. LEONOR** – Anthropology  
A.A., Fullerton College  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton  
M.A., Claremont Graduate University

Ph.D., Claremont Graduate University

**CALLAHAN, LINA** – Foreign Language  
B.S., California State University, Long Beach  
M.A., California State University, Long Beach

**CAMPBELL, GARRETT** – Physical Education  
A.A., Fullerton College  
B.S., California State University, Fullerton  
M.S., Northern State University, South Dakota

**CARLIN, ANNA** – Computer Information Systems  
B.S., California State Polytechnic University, Pomona  
M.S., California State Polytechnic University, Pomona

**CARRITHERS, JOE** – English  
B.A., Mississippi State University  
M.A., Mississippi State University  
M.A., University of Southern California  
Ph.D., University of Southern California

**CARTER, DAN** – Technology and Engineering  
A.S., Fullerton College

**CHAMBERLIN, W. SEAN** – Oceanography  
B.A., University of Washington  
Ph.D., University of Southern California

**CHAN, THEODORE C.** – Chemistry  
B.S., California State University, Long Beach  
M.S., California State University, Los Angeles

**CHIANG-SCHULTHEISS, DARREN** – English  
B.A., California State University, Fullerton  
M.A., University of Nebraska, Lincoln

**CHIAROMONTE, THOMAS** – Child Development and Educational Studies  
B.A., California State University, Long Beach  
M.S., Iowa State University  
Ph.D., The Claremont Graduate University

**CHO, LEONARD Y.** – Mathematics  
B.S., University of California, Los Angeles  
M.S., University of Southern California  
M.A., California State University, Fullerton

**CLAASSEN, MAREIKE** – Mathematics and Computer Science  
Technology and Engineering – Engineering  
M.A., California State University, Fullerton  
M.S., University of California, Berkeley  
Ph.D., University of California, Berkeley

**CLAHANE, DANA D.** – Mathematics  
B.S., Biola University  
M.A., California State University, Long Beach  
Ph.D., University of California, Irvine

**CLASBY, CANDICE M.** – Theatre Arts  
B.A., California State University, Fullerton  
M.F.A., California State University, Los Angeles

**CLIFTON, ANDREW** – Computer Science  
B.A., Thomas Edison State University, Trenton, New Jersey  
M.A., California State University, Fresno

**CLOWES, KEVIN** – Theatre Arts

B.A., California State University, Fullerton

**COBLER, TIMOTHY** – Mathematics

B.S., California Polytechnic University, Pomona  
M.S., California Polytechnic University, Pomona  
M.S., University of California, Riverside  
Ph.D., University of California, Riverside

**COLLINS, KENNETH P.** – Biology

B.S., Brigham Young University  
M.S., Brigham Young University  
Ph.D., North Carolina State University

**COMBS, JENNIFER** – Counseling

B.A., University of Michigan  
M.A., University of California, Santa Barbara  
Ph.D., University of California, Santa Barbara

**CONTRERAS, GILBERT** – President, Interim

B.A., University of California, Berkeley  
M.A., MIT  
Ph.D., University of California, Los Angeles

**COSTELLO, JEANNE** – English

B.A., University of California, Los Angeles  
M.A., University of California, Santa Barbara

**COWIESON, WILLIAM J.** – Mathematics

B.S., University of Redlands  
Ph.D., University of California, Los Angeles

**CRAIG, DALE** – Computer Information Systems

B.A., California State University, Long Beach  
M.A., California State University, Long Beach

**CRIPPEN, JAMES** – Philosophy and Religious Studies

A.A., Fullerton College  
B.A., Sonoma State University, Rohnert Park, California  
M.A., University of Warwick, Coventry, England  
Ph.D., Temple University, Philadelphia, Pennsylvania

**CROOKS, BRIAN** – Physical Education

B.S., California State University, Fullerton  
M.A., National University

**CUATT, BENJAMIN P.** – Printing Technology

B.A., University of California, San Diego

**CUMMINGS-SUMNER, VONN** – Art

B.A., University of California, Davis  
M.F.A., University of California, Davis

**CURRIE, ADRIANA** – Interior Design

B.A., California State University, Long Beach

**–D–**

**DADSON, GUY W.** – Chemistry

B.S., University of Utah  
M.S., California State University, Fullerton

**DAHI, NAJI J.** – Political Science

B.A., American University of Beirut  
M.A., University of Southern California  
Ph.D., University of Southern California

**DANIEL, WILLIAM** – Manufacturing Technology/Welding

A.S., Fullerton College  
B.S.M.E., California State University, Fullerton

**DAVIDSON, DEBORAH J.** – Art

M.A., California State University, Fullerton  
M.F.A., California State University, Long Beach

**DAWSON, BRADLEY** – Biology/Microbiology/Health

B.A., Luther College  
Ph.D., University of California, Irvine

**DEBIN, MEGAN LORAIINE** – Art

B.A., University of California, Los Angeles  
M.A., University of California, Los Angeles  
Ph.D., University of California, Los Angeles

**DEDMON, NICOLA B.** – Music

B.M., James Madison University  
M.M., Westminster Choir College

**DE JESUS, ROMAN** – Oceanography

B.S., University of California, San Diego  
Ph.D., University of California, San Diego

**DELGADO, ZIZA** - Ethnic Studies

B.A., University of California Berkeley  
M.A., University of California, Berkeley  
Ph.D., University of California, Berkeley

**DELSHAD, ARCHIE** - Political Science

B.A., University of California, Irvine  
M.A., University of California, Irvine  
Ph.D., University of California, Irvine

**DIAZ, ROBERT** – Mathematics

A.A., Los Angeles Pierce College  
B.A., California State University, Northridge  
M.S., California State University, Northridge

**DIMITRATOS, SPIRIDON** – Biology

B.S., University of California, Los Angeles  
Ph.D., University of California, Irvine

**DIMITRIADIS, PHILIP** – Art/Digital Arts

B.F.A., California State University, Fullerton  
M.F.A., California State University, Fullerton

**DOBYNS, SHEILAH STOKES** – English

B.A., University of San Francisco  
M.A., California State University, Fullerton

**DOMINGUEZ JR., ELIAS G.** – Counseling

B.A., University of California, Irvine  
M.S., University of La Verne

**DORADO, DAVID** – Biology

B.S., University of California, Riverside  
M.S., University of California, Santa Cruz

**DOWDALLS, JAMES** – Art

B.F.A., California State University, Long Beach  
M.A., California State University, Long Beach

**DUNSMORE, PAMELA** – English

B.A., University of California, Berkeley

M.A., California State University, Fullerton

**DURAN, SONIA** - Director, EOPS/CARE, CalWORKs and FYSI  
B.A., Western Oregon University  
M.A., Argosy University

**DURON, YOLANDA** – Physical Education  
A.A., North Central Texas College  
B.S., Drexel University  
M.S., California State University, Fullerton  
Ed.D., University of California, La Verne

## –E–

**EDWARDS, ARNETTE** - Counseling (EOPS/CARE)  
A.A., Cypress College  
B.S., California State University, Fullerton  
M.S., National University  
Ed.D., California State University, Fullerton

**EDWARDS, SCOTT W.** – Computer Science  
B.M., California State University, Fullerton  
M.M., California State University, Fullerton  
M.S., California State University, Fullerton

**EISNER, DOUGLAS** – English  
A.B., Washington University  
M.A., University of Wisconsin, Madison  
Ph.D., University of California, Riverside

**ENGLAND, ELLI** – English  
A.A., Fullerton College  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**ESPINOSA, TIMOTHY** – Theatre Arts  
B.F.A., California State University, Fullerton  
M.F.A., Brandeis University

## –F–

**FALB, CARLA** – Art  
B.F.A., The Philadelphia College of Art  
Certificate in Fine Arts, The Pennsylvania Academy of the Fine Arts  
M.F.A., The University of the Arts

**FARLEY, JOHN** – Automotive Technology  
A.S., Fullerton College  
B.S., Weber State University

**FAROL, RONALD** – English  
A.A., Cerritos College  
B.A., California State University, Dominguez Hills  
M.A., California State University, Dominguez Hills

**FARNHAM II, PAUL T.** – Mathematics  
A.S., Long Beach City College  
B.S., California State University, Long Beach  
M.A., California State University, Fullerton

**FEASTER, JEFFREY E.** – Biology/Horticulture  
B.A., California State University, Fullerton  
M.S., University of California, Riverside

**FELENDER, JULIE** – Psychology  
B.A., California State University, San Diego

Ph.D., University of California, Santa Barbara

**FERNANDEZ, CHRISTOPHER** – Chemistry  
A.A., Fullerton College  
B.S., California State University, Fullerton  
M.S., California State University, Fullerton

**FERNANDEZ, GABRIELLA** – Computer Information Systems  
B.A., California State University, Fullerton  
M.B.A., California Polytechnic University, Pomona

**FIERRO, DENIZ** – Director, Educational Partnerships and Programs/  
Promise  
B.A., University of California, Los Angeles  
M.Ed., University of California, Los Angeles  
Ed.D., California State University, Fullerton

**FLOERKE, BRANDON G.** – English  
A.A., Fullerton College  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**FLORES, CHRISTY** – English  
B.A., University of California, Los Angeles  
M.A., University of Washington, Seattle  
Ph.D., University of Washington, Seattle

**FOSTER, MARCIA** – Physical Education  
B.A., Seton Hall University  
M.S., California State University, Fullerton

**FOSTER, SAMUEL** – Chemistry  
B.S., Andrews University  
Ph.D., University of California, Irvine

**FOUQUETTE, DANIELLE** – English  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**FRABONI, AMERICO** - Chemistry  
B.S., Carnegie Mellon University  
Ph.D., Rutgers University, Newark

## –G–

**GABALDON, NADIA** - Student Support Services  
Disability Support Services  
B.A., University of Maryland, College Park  
M.A., Loyola Marymount University  
M.A., Loyola Marymount University

**GAITATJIS, ELIZABETH B.** – English as a Second Language (ESL)  
B.A., Rutgers University, New Jersey  
M.A., Northeastern Illinois University

**GAMBOA, JORGE** – Dean, Social Sciences  
B.A., California State University, Fullerton  
M.A., National University  
Ed.D., California State University, Long Beach

**GAMBOA, ROBERT** – Counseling  
A.A., Citrus College  
B.A., California State University, Fullerton  
M.S., University of La Verne

**GARCIA, AMY M.** – Reading



B.A., California State University, Fullerton  
M.S., California State University, Fullerton

**GARCIA, JESSICA** – Counseling

A.A., Fullerton College  
B.A., California State University, Fullerton  
M.S.W., University of Southern California

**GARCIA, MICHELLE** – Director, Educational Partnerships

A.A., Rio Hondo Community College  
B.A., California Polytechnic University, Pomona  
M.S., California State University, Fullerton  
Ed.D., California State University, Fullerton

**GARCIA, RODRIGO** – Vice President, Administrative Services

B.A., California Polytechnic University, Pomona  
M.A., California State University, Fullerton  
C.P.A. – Certified Public Accountant, California

**GHIDELLA, RICHARD** – Business Management and Real Estate

A.A., Fullerton College  
B.A., California State University, Fullerton  
M.B.A., California State University, Fullerton

**GILES, SCOTT** – Athletic Director, Physical Education

B.S., Brigham Young University  
M.S., Brigham Young University

**GONZALEZ, JUAN PABLO** – EOPS/CARE

B.S., California State University, Fullerton  
M.S., University of La Verne

**GONZALES, MARIO** – Music

B.F.A., California Institute of the Arts  
M.F.A., California Institute of the Arts

**GONZÁLEZ, AMBER ROSE** – Ethnic Studies

A.A., Mount San Antonio College  
B.A., California Polytechnic University, Pomona  
M.A., University of California, Santa Barbara  
Ph.D., University of California, Santa Barbara

**GRAVES, GARY** – Business Management

B.S., University of Phoenix  
B.A., University of Phoenix  
M.A., Azusa Pacific University  
M.B.A., University of Phoenix

**GREENHALGH, MARK** – Dean, Mathematics and Computer Science

B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**GREGORIO, ALINE** – Geography

A.A., Fullerton College  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**GREIN, CYNDI** – Manager, Campus Accounting

A.A., Fullerton College  
B.S., California Polytechnic University, Pomona  
M.A., Augustine Institute

**GROSSMAN, DAVID** – Dean, Physical Education

A.A., West Valley College

B.A., California State University, Fullerton  
M.S., California State University, Fullerton  
Ed.D., California State University, Fullerton

**GUARDADO, CYNTHIA** – English

B.A., University of California, Santa Cruz  
M.A., California State University, Fresno

**GUILD, TRACY** – Psychology

B.A., University of California, Irvine  
M.A., Pepperdine University, Irvine

**GUSS, HEIDI** – English

B.A., California State University, San Diego  
M.A., California State University, Fullerton

**GUTHRIE, FRANK J.** – Digital Arts

A.S., Cypress College  
B.A., California State University, Long Beach

**-H-**

**HALVERSON, HEATHER** – Counseling

B.A., California Polytechnic University, Pomona  
M.S., California State University, Fullerton

**HARLESS, ZACHARY T.** – Theatre Arts

B.A., California Polytechnic College, Pomona  
M.P.M., Keller Graduate School of Management

**HARRIS, RANDY** – Manager, Maintenance and Operations

A.A., Coastline Community College

**HATTA BAUGH, JON-MICHAEL** - Counseling

B.A., University of LaVerne  
M.A., University of LaVerne

**HEATH, CAROLYN** – Earth Science and Biological Science

B.S., University of California, Berkeley  
Ph.D., University of California, Santa Cruz

**HENDERSON, ANGELA** – English

B.A., University of California, Santa Barbara  
M.S., California State University, Fullerton  
M.A., California State University, Fullerton

**HENKE, CAROL** – Art

B.A., Cornell University  
M.A., California State University, Fullerton

**HENKE, WILLIAM D.** – Art

B.A., California State University, Fullerton  
M.A., California State University, Fullerton  
M.F.A., California State University, Fullerton

**HIGGINS, RITA** – Nutrition and Foods

B.S., University of California, Irvine  
M.P.H., Loma Linda University

**HINARO, NAHRIN** – Counseling

A.A., Modesto Junior College  
B.A., University of California, Irvine  
M.S., California State University, Long Beach

**HO, CO** - Manager, Academic Computing Technologies

B.S., California State University, Fullerton

C.S., California State University, Fullerton  
 M.B.A., California State University, Fullerton  
 MDiv, Fuller Theological Seminary

**HOBBS, ROYDEN J.** – Environmental Science  
 B.A., University of California, San Diego  
 M.S., Ohio University  
 Ph.D., University of Arizona

**HORNELL, KLAUS** – Foreign Language  
 B.A., Miami University, Oxford, OH  
 M.A., California State University, Fullerton

**HUERTA, FLOR** – Counseling/Career Development  
 B.A., California State University, Long Beach  
 M.S., California State University, Long Beach

**HUERTA, NICOLAS** – Mathematics  
 B.A., California State University, Fullerton  
 M.A., California State University, Fullerton

**HUGHES, DEIDRE** – Reading  
 B.A., Scripps College  
 M.A., Northern Arizona University  
 M.S., California State University, Fullerton

**HUI, ARTHUR** – English as a Second Language (ESL)  
 B.A., University of California, San Diego  
 M.A., San Francisco State University

## –I–

**IGNATOVSKI, STEFAN** - Accounting  
 B.S., Indiana State University, Terre Haute  
 M.S., Roosevelt University, Chicago  
 Ph.D., Walden University, Minneapolis

**IKEDA, NANCY** – Mathematics  
 B.S., University of California, Irvine  
 M.A., California State University, Fullerton  
 M.S., California State University, Fullerton

**ISHIBASHI, JANE** – Library  
 B.A., University of California, Los Angeles  
 M.L.I.S., University of California, Berkeley

**ISON, JOHN** – English  
 B.A., University of California, Los Angeles  
 M.A., California State University, Los Angeles  
 Ph.D., University of California, Riverside

## –J–

**JAGODINA, MARIANNA** – Mathematics  
 B.S., Eastern Oregon University  
 M.S., California State University, Long Beach

**Ji, SEUNG** - Physics  
 B.S., University of California, Berkeley  
 M.S., University of California, Los Angeles  
 Ph.D., University of California, Los Angeles

**JIMMONS, CHARLOTTE** – Cosmetology  
 A.A., Cerritos College

**JOHNSON, JESSICA** - Manager, Tutoring Programs

B.A., Embry-Riddle Aeronautical University  
 M.A., California State University, Fullerton

## –K–

**KAGEYAMA, JILL** – Library  
 B.A., University of California, Los Angeles  
 M.L.I.S., University of California, Los Angeles

**KARVIA, NICK** – Director, Bookstore  
 A.A., Lower Columbia Community College  
 B.A., Western Washington University

**KELLER, JONATHAN** - Construction Technology  
 A.S., Fullerton College  
 B.S.A.T., California Southern University

**KELLY-MANDICH, LINDA** – Counseling  
 B.A., Loyola Marymount University  
 M.S., California State University, Los Angeles

**KEMP, DARNELL** – Director, Distance Education  
 B.A., Chapman University  
 M.A., California State University, Long Beach

**KIM, KELLY** – Foreign Language  
 A.A., Saddleback College  
 B.A., University of California, Los Angeles  
 M.A., University of California, Los Angeles  
 Ph.D., University of California, Los Angeles

**KIMURA, STEWART** – Counseling  
 B.A., University of California, Santa Barbara  
 M.A., California Lutheran University

**KING, KATHRYN** – English  
 B.A., California State University, Long Beach  
 M.A., Loyola Marymount University

**KINKEL, JENNIFER** – Child Development and Educational Studies  
 B.A., University of California, Irvine  
 M.A., Pacific Oaks College, Pasadena

**KIRBY, BRENDON** - Welding Technology  
 A.A., Cypress College  
 A.S., Fullerton College  
 B.A., California State University, Fullerton  
 M.B.A., Grand Canyon University

**KLASSEN, KELLY** – Mathematics  
 B.A., California State University, Fullerton  
 M.S., San Diego State University

**KLIPPENSTEIN, STEPHEN** – Art  
 A.A., Fullerton College  
 B.F.A., Art Center College of Design

**KOMINEK, BRIDGET** – English  
 B.A., California State University, Fullerton  
 M.A., California State University, Fullerton

**KRAG, SAMANTHA** – English  
 A.A., Chaffey College  
 B.A., California State University, Fullerton  
 M.A., California State University, Fullerton

**KRESSE, DOUGLAS** – Communication Studies  
M.A., California State University, Fullerton

**KROUPA, KAITLIN A.** – Anatomy/Physiology/Microbiology  
B.S., University of California, San Diego  
M.S., California State University, Long Beach

**KVASKA, COLLEEN** – Foods and Nutrition  
B.S., Central Michigan University  
M.A., California State University, Long Beach

## –L–

**LaBOUNTY, JENNIFER** – Dean, Counseling/Student Development  
B.A., Chapman University  
M.A., Pepperdine University  
Ed.D., Brandman University

**LA MONTIA, MELODY** – Photography  
B.F.A., Academy of Art College, San Francisco  
M.F.A., California State University, Long Beach

**LANGLOIS, JESSICA** - Journalism  
B.A., New York University  
M.F.A., Mills College

**LARA, LARRY** – Director of Physical Plant and Facilities  
B.S., California State University, Long Beach

**LARSEN, CHRIS** – Mathematics  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**LATOURELLE, ELISA** - Counseling  
B.A., University of California, Santa Barbara  
M.A., University of LaVerne

**LAZARUS, LAURA** – Chemistry  
B.A., University of California, Irvine  
B.S., California State University, Los Angeles  
Ph.D., University of Southern California

**LEE, MONICA** – Music  
B.M., University of Oklahoma  
M.M., University of Maryland  
D.M.A., Northwestern University

**LEE, SCOTT** – Counseling/Student Development  
Articulation Officer  
B.S., California State University, Fullerton  
M.A., California State University, Dominguez Hills  
Ed.D., Argosy University

**LEVESQUE, RICHARD** – English  
B.A., California Polytechnic University, Pomona  
M.A., California Polytechnic University, Pomona  
Ph.D., University of California, Riverside

**LEWIN, PAMELA** – Physical Education  
A.A., Orange Coast College  
B.A., California State University, Hayward  
M.S., California State University, Hayward

**LINAHON, JAMES J.** – Music  
B.A., University of Northern Iowa

M.M.E., North Texas University

**LINGGI, EDWARD** – Foreign Language  
M.A., University of California, Santa Barbara

**LIPIZ GONZALEZ, ELAINE** - Dean, Student Support Services  
B.A., University of California, Irvine  
M.S., California State University, Long Beach  
Ed.D., California State University, Fullerton

**LIU, ANNIE** – English  
B.A., University of California, Irvine  
M.A., University of California, San Diego

**LONEY, LAURA** – Mathematics  
B.S., California State University, Long Beach  
M.S., California State University, Long Beach

**LOPEZ, BRIAN** – Psychology  
B.S., University of California, San Diego, La Jolla  
Ph.D., University of California, Santa Barbara

**LOPEZ, DAVID** – Automotive Technology  
A.S., Rio Hondo College  
B.A., University of Phoenix

**LOPEZ, DAVID F.** – Music  
B.M., California State University, Long Beach  
M.M., California State University, Fullerton  
D.M.A., University of Arizona

**LOPEZ, RUBEN** – Geography  
B.A., Occidental College, Los Angeles  
M.A., California State University, Fullerton  
M.A., Chapman University, Orange

**LOPEZ-CASILLAS, LUPE L.** – Counseling  
B.A., California State University, Los Angeles  
M.S., California State University, Los Angeles

**LOY, MICHELLE** – Nutrition and Foods  
B.S., Missouri State University  
M.P.H., St. Louis University  
M.S., St. Louis University

## –M–

**MACIAS, VALENTIN** – Library  
A.A., A.S., Riverside City College  
B.A., University of California, Santa Cruz  
M.A., University of California, Santa Cruz  
M.L.I.S., University of Alabama, Tuscaloosa

**MALLOY, SCOTT** – Mathematics  
A.A., Fullerton College  
B.A., University of California, Los Angeles  
M.S., California State University, Northridge

**MANDE, ANUPAMA** – History  
B.A., Stella Maris College (India)  
M.A., Ph.D., Ohio State University

**MANGAN, MICHAEL** – English  
A.A., Long Beach City College  
B.A., California State University, Long Beach

M.F.A., California State University, Long Beach

**MARKLEY, KAREN** – Anthropology  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**MARQUEZ, LORENA** – Counseling  
A.A., Santa Ana College  
B.A., University of California, Los Angeles  
M.S., California State University, Long Beach

**MARTINEZ STLUKA, RENA** – Director, Admissions and Records  
A.A., Fullerton College  
B.A., American Public University  
M.A., American Public University

**MATAVAO, ULVALE** – Counseling  
A.A., Mt. San Antonio College  
B.S., Florida International University  
M.S., California State University, San Bernardino

**MAYFIELD, PHILIP F.** – English  
B.A., University of California, Santa Barbara  
M.A., University of Houston

**MCCARTHY, BARRY KENDALL** – Business  
B.S., University of Maryland  
M.A., American Military University

**McGUTHRY, KATHERYN** – Psychology  
B.S., Howard University  
M.S., University of California, San Diego  
Ph.D., Howard University

**MCPHERON, LISA** – Director, Campus Communications  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**MAINE, ROBERT** - Automotive Technology  
A.A., Santa Ana College

**MELELLA, LAURA** – Computer Information Systems  
B.S., California State University, Fresno  
M.A., Pepperdine University

**MENTON, Allen** - Music  
B.M., California State University, Long Beach  
M.M., University of Southern California  
Ph.D., University of California, Los Angeles

**MIHAYLOVICH, KRISTIN** – Art  
B.A., University of Maryland, College Park  
M.A., University of California, Riverside

**MILLS, RENEE** – Disability Support Services  
B.S., Pacific Union College  
M.A., Loma Linda University  
Ph.D., Loma Linda University

**MINTON, JEFFREY A.** – Photography  
A.A., Pasadena City College  
B.A., University of California, Riverside  
M.F.A., California State University, Fullerton

**MIRANDA, JOSE VICTOR** – Automotive Technology

B.A., California State University, Long Beach

**MONTOYA, MANUEL** – Counseling  
A.A., Merced College  
B.A., California State University, Chico  
M.S., California State University, Long Beach

**MOORE, MICHAEL** - Paralegal Studies  
A.S., Fullerton College  
B.S., National University, San Diego

**MORRIS, TOM E.** – Environmental Science  
B.S., San Diego State University  
M.A., University of California, Berkeley

**MOSCOL, MEGAN** – Assistant Manager, Campus Capital Projects  
B.S., University of California, Davis

**MUELLER, MICHAEL** – Theatre Arts  
B.F.A., Wright State University  
M.F.A., University of Pittsburgh

**MUMMERY, FRANCIS** – Economics  
A.S., Cypress College  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton  
M.B.A., California State University, Fullerton

## – N –

**NAGEL, ANASTASIA** – Biology  
B.A., Grinnell College  
Ph.D., University of California, Irvine

**NEGUS, A. LYNNE** – History  
B.A., University of California, Berkeley  
M.A., University of California, Berkeley  
M.A., University of California, Los Angeles  
Ph.D., University of California, Los Angeles

**NELSON-WRIGHT, KELLY** – Sociology  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**NEVAREZ, RACHEL** - Fashion Technology  
A.A., Fashion Institute of Design and Merchandising  
B.A., University of Pittsburgh

**NGUYEN, GREGORY V.** – Mathematics  
A.A., Orange Coast College  
B.S., California State University, Long Beach  
M.S., California State University, Long Beach

**NGUYEN, KARYN** – Counseling  
B.A., University of San Diego  
M.A., University of San Diego

**NIELSON, TONI** – Communication Studies  
B.S., California State University, Fullerton  
M.A., California State University, Long Beach

**NIKKHOO, KRISTINE** – Director, Academic Support Programs  
B.A., University of California, Los Angeles  
M.A., California State University, Fullerton

**NILKANTH, GITANJALI** – Biology

B.S., Gandhiji University, India  
 M.S., University of Bombay, India  
 Ph.D., University of Bombay, India

**NOBLES, STEPHANIE A.** – Chemistry  
 B.S., University of California, Irvine  
 M.S., California State University, Fullerton

**NÚÑEZ, JOSE RAMÓN** – Vice President, Instruction  
 B.A., University of Madrid  
 M.A., University of Madrid  
 Ph.D., University of California, Los Angeles

## –O–

**O'BRIEN, DANIEL** – Machine Technology  
 B.A., California State University, Long Beach  
 M.A., University of Phoenix

**OKONYAN, STEFANI D.** – English  
 B.A., University of California, Santa Barbara  
 M.A., Claremont Graduate University  
 Ph.D., Claremont Graduate University

**OPPENHEIM, NORIKO** – Foreign Language  
 M.A., Columbia University, New York

**ORLIJAN, KIMBERLY** – English  
 B.A., University of California, Riverside  
 M.A., University of California, Riverside  
 Ph.D., University of California, Riverside

**O'ROURKE, MEG** – English  
 A.A., Fullerton College  
 B.A., California State University, Fullerton  
 M.A., California State Polytechnic University, Pomona

**OUCHI, BRYAN Y.** – Disability Support Services  
 B.A., University of California, Los Angeles  
 M.A., Fuller Theological Seminary  
 M.A., Alliant International University

## –P–

**PAIGE, DEBORAH** – English  
 B.A., California State University, San Marcos  
 M.A., California State University, San Marcos

**PAVELEK, KARIN** – Child Development and Educational Studies  
 A.A., Fullerton College  
 B.S., California State University, Fullerton  
 M.S., California State University, Fullerton

**PAYÁN-HERNÁNDEZ, MARTHA** – Director, Special Projects - Career and Technical Education  
 A.A., East Los Angeles College  
 B.A., California State University, Long Beach  
 M.A., California State University, San Bernardino

**PEREZ, ELSA** – Counseling  
 A.A., Fullerton College  
 B.S., California State University, Fullerton  
 M.A., Azusa Pacific University

**PEREZ, JAIME** – Art  
 B.A., University of California, Los Angeles

M.A., California State University, Long Beach

**PEREZ, ROGER** – English  
 B.A., California State University, Fullerton  
 M.A., California State University, Fullerton

**PEREZ, WENDY** – Cosmetology  
 A.S., Fullerton College  
 B.S., Southern Illinois University, Carbondale

**PERSICILLI, CHRISTOPHER** - Physics  
 B.S., Rensselaer Polytechnic Institute, New York  
 M.S., Rensselaer Polytechnic Institute, New York  
 Ph.D., University of California, Irvine

**PETERSON, QUEEN** – Counseling  
 M.A., Chapman University  
 Ed.D., Argosy University

**PETRIE, CALEB** – Mathematics  
 B.A., Biola University  
 M.A., University of Southern California  
 Ph.D., Auburn University

**PHAM, KARA** – Mathematics  
 B.S., University of California, Irvine  
 Ph.D., University of California, Irvine

**PIAZZA, STEPHANIE** – English  
 B.A., California State University, Fullerton  
 M.S., California State University, Fullerton

**PIMENTEL, SYLVIA** – Counseling  
 B.A., California State University, Fresno  
 M.S.W., University of Southern California

**PLUM, ALIX** – Physical Education  
 B.A., California State University, Long Beach  
 M.A.Ed., Azusa Pacific University

**POPE, DANIEL L.** – Art  
 B.A., Chapman University  
 M.A., California State University, Long Beach

**POWERS, MIGUEL** – English  
 B.A., University of San Diego  
 M.A., Indiana University  
 Ed.D., University of California, Los Angeles

**PRICE, RENE** – Mathematics  
 B.S., California State University, Long Beach  
 M.S., California State University, Long Beach

**PRICE, RHETT J.** – Recreation Administration  
 A.A., Fullerton College  
 B.A., California State University, Long Beach  
 B.S., California State University, Long Beach  
 M.S., California State University, Long Beach

## –R–

**RAPP, EDWARD** – Physical Education  
 B.S., California State University, San Diego  
 M.Ed., Azusa Pacific University

**RASCH, KAYLAN** – Counseling

B.A., California State University, Fullerton  
M.S., California State University, Northridge

**RAUDA, IRIS E.** – Chemistry  
B.S., California State University, Los Angeles  
M.S., California State University, Los Angeles  
Ph.D., University of California, Los Angeles

**RAY, ALAN** - Architecture  
B.A., California State Polytechnic University, Pomona

**REAM, TIM** – Library  
B.A., University of California, Los Angeles  
M.L.I.S., San Jose State University

**REILLY, JOSEPH** – History/Political Science  
B.A., University of California, Los Angeles  
M.A., University of California, Los Angeles

**REINHARDT-ZACAIR, CATHERINE** – Foreign Language  
B.S., University of Wisconsin, Madison  
M.A., University of California, Santa Barbara  
Ph.D., University of California, Santa Barbara

**REYES JR., JOE S.** – Counseling  
A.A., Compton Community College  
B.A., University of California, Los Angeles  
M.S., California State University, San Diego

**RICHARDSON, KRISTY** – Foods and Nutrition  
B.S., California Polytechnic University, San Luis Obispo  
M.P.H., University of California, Los Angeles  
M.S., California State University, Fullerton

**ROACH, BRIAN** - Computer Information Systems  
B.S., University of Phoenix  
M.A., Webster University  
M.S., National Intelligence University

**ROBERTSON, KELLY** – Administration of Justice  
B.S., California Polytechnic University, Pomona  
M.A., California State University, Dominguez Hills

**RODRIGUEZ, JEANETTE** – Communication Studies  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**RODRIGUEZ, LUCIANO** – Computer Science  
B.S., Chapman University  
M.S., Chapman University

**ROMERO HERNANDEZ, ABRAHAM** – Mathematics  
B.A., California State University, Los Angeles  
M.A., California State University, San Bernardino

**ROSA, MELANIE K.** – Dance  
B.A., University of California, Irvine  
M.A., University of California, Irvine  
M.F.A., University of California, Irvine

**ROSALES, ALEXANDRIA** - Counseling (EOPS/CARE)  
B.A., California State University, Long Beach  
M.S., California State University, Long Beach

**ROSALES, KIMBERLY R.** – Biology

B.S., Ph.D., University of California, Irvine

**ROSEN, ELLEN M.** – English as a Second Language (ESL)  
B.A., Calvin College, Grand Rapids, Michigan  
M.A., University of California, Los Angeles

**ROSEN, LUGENE** – Library  
B.A., Chapman University  
M.A., Chapman University  
M.L.I.S., San Jose State University

**ROSSI, NICOLE** – Mathematics  
B.S., California State University, Long Beach  
M.S., California State University, Long Beach

**ROTH, EDWARD** – Director, Disability Support Services  
B.A., George Fox College  
M.Ed., Oregon State University  
M.A., University of Southern California  
Ph.D., University of Southern California

**RUIZ, ROSALINDA M.** – English  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton  
M.S., California State University, Fullerton

**RUNDUS, KATHARIN** – Music  
B.M., Coe College  
M.M., Westminster Choir College  
D.M.A., Claremont Graduate University

**RYAN, GREG** – Director, Financial Aid  
B.F.A., California Institute of the Arts  
M.A., University of Liverpool

## –S–

**ST. JOHN, PAUL** – Accounting  
A.A., Santa Monica College  
B.S., California State University, Long Beach  
CPA - Certified Public Accountant, California

**SABAU, BIANCA** – English  
B.A., Chapman University  
M.A., Chapman University

**SAGHIEH, OSCAR** – Project Manager, Campus Capital Projects  
B.S.C.E., University of Toledo, Ohio  
D.E.S.S., Universite D'Aix-Marseille III, France

**SALCEDO, JOEL** - Communication Studies  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**SALZAMEDA, BRIDGET** – Chemistry  
B.A., University of San Diego  
Ph. D., University of Nevada, Reno

**SALAZAR-PEREZ, YVONNE** – Cosmetology  
A.A., Cerritos College  
B.S., Southern Illinois University

**SALZAMEDA, BRIDGET** – Interim Dean, Natural Sciences  
B.A., California State University, San Diego  
Ph.D., University of Nevada, Reno

**SAMANO, JEFFREY R.** – Communication Studies  
B.A., California State University, Long Beach  
M.A., California State University, Long Beach

**SAMPSON, KEVIN** – Administration of Justice  
B.A., California State University, Long Beach  
M.S., M.Ed., University of La Verne  
Ed.D., University of Southern California

**SANABRIA, ROLANDO** – Counseling  
B.S., California State University, Fullerton  
M.S., California State University, Long Beach  
Ed.D., Argosy University

**SANCHEZ, ADRIANA** – English  
A.A., East Los Angeles College, Monterey Park  
B.A., California State University, Los Angeles  
M.A., California State Polytechnic University, Pomona

**SANTANA, CITLALLY** – Counseling  
B.A., University of Southern California  
M.A., California State University, Dominguez Hills

**SAPIRO, JACOB** – Anatomy/Physiology/Microbiology; Biology  
B.S., Brooklyn College  
Ph.D., Case Western Reserve University

**SCARPA, DANIEL J.** – English  
B.A., California State University, Long Beach  
M.F.A., San Jose State University

**SCHULZE, MICHAEL** – English  
B.A., California State University, Long Beach  
M.A., Chapman University, Orange  
M.F.A., Chapman University, Orange

**SCOTT, MICHAEL** – Music  
B.M., University of Southern California  
M.M., University of Southern California

**SCOTT, MING-YIN** – Accounting  
B.S., Brigham Young University  
M.B.A., Brandan University  
CPA - Certified Public Accountant, California

**SHEEHAN, MICHAEL** - Art (Digital Arts)  
A.A., Fullerton College  
B.F.A., Art Center College of Design, Pasadena

**SEIDEL, JAY** – Journalism and Drone Technology  
A.A., Fullerton College  
B.A., California State University, Long Beach  
M.A., California State University, Fullerton

**SELBY, STEVEN S.** – Director, Campus Safety  
A.A., Rio Hondo College  
B.S., Pepperdine University

**SEMANA, SONIA** - Special Projects Manager/CDES Lab School  
B.A., Mount Saint Mary's University, Los Angeles  
M.A., Pacific Oaks College

**SHAH, KETAN** – Mathematics  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**SHAHIN, MOHAMMAD** – Chemistry  
B.S., University of California, San Diego  
M.S., University of California, San Diego

**SHEDD, KRISTEN** – History  
A.B., Bowdoin College, Brunswick, Maine  
M.A., University of California, Santa Barbara  
Ph.D., University of California, Santa Barbara

**SHEIL, SEAN** – Physical Education  
B.A., California State University, Stanislaus  
M.S., California Polytechnic University, San Luis Obispo

**SHEW, JAMIE** – Music  
B.M., Washington State University  
M.M., Western Michigan University

**SHIROMA, RYAN M.** – English  
B.A., California State University, Long Beach  
M.F.A., Eastern Washington University

**SHOTWELL, BRIAN** – Physics  
B.S., University of California, Berkeley  
M.S., Yale University  
Ph.D., University of California, San Diego

**SHYROKOVA, ANNA** – Library  
B.A., University of California, Berkeley  
M.S., University of Michigan, Ann Arbor

**SISKIND, JEREMY** – Music  
B.A., Eastman School of Music  
M.A., Columbia University

**SJOBORG, PAUL** – Mathematics  
B.S., University of Redlands  
M.A., University of California, Santa Barbara

**SMEDLEY, DEANNA** – Counseling  
A.A., Mt. San Antonio College  
B.A., California State University, Fullerton  
M.S., University of La Verne

**SMITH, ARNETTA** – Ethnic Studies  
B.A., San Francisco State University  
M.A., San Francisco State University

**SMITH, GEOFFREY** – English  
B.A., Point Loma Nazarene University  
M.A., California State University, Fullerton  
M.S., Walden University

**SMITH, TODD** – Art  
B.A., Sonoma State University  
B.F.A., Sonoma State University  
M.F.A., California State University, Long Beach

**STANAWAY, CARL** – Art  
B.F.A., California State University, Chico  
M.F.A., Cranbrook Academy of the Arts

**STANDEN, KATHLEEN G.** – Business Management  
B.S., Ohio State University  
B.A., Ohio State University  
M.B.A., University of California, Los Angeles

**STARKEY, MONIQUE** – Library  
B.S., Louisiana State University, Baton Rouge  
M.S.I.S., University of Texas, Austin

**STARKMAN, KEN** – Dean, Technology and Engineering  
B.S., University of Wisconsin, Stout  
M.S., University of Wisconsin, Stout

**SWAYZER, LUELLEN** - Horticulture  
B.S., California Polytechnic University, Pomona  
M.S., University of Georgia

## -T-

**TAGUCHI-TRIEU, TANOMO** – Mathematics  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**TAYLOR, MATTHEW D.** – Communication Studies  
B.S., Pacific Lutheran University  
M.S., University of Oregon  
Ph.D., University of Southern California

**TEBAY, JOHN C.** – Dean, Fine Arts  
B.M., Biola University  
M.M., California State University, Long Beach

**TELLEFSEN, BLYTHE A.** – English  
A.B., Occidental College  
M.A., California State University, Los Angeles  
Ph.D., University of California, Riverside

**TIANGCO, JEFFERSON** – English as a Second Language (ESL)  
A.A., Norco College  
B.A., California State University, Fullerton  
M.S., California State University, Fullerton

**TIMMERMANS, DANA** - Director, Behavioral Health Services  
A.A., Orange Coast College  
B.A., San Francisco State University  
M.A., University of San Francisco

**TOVAR, ANA** – Transfer Center  
A.A., Orange Coast College  
B.A., University of California, Los Angeles  
M.S., California State University, Long Beach

**TRAN, BRANDON** – Accounting  
B.S., California State University, Fullerton  
CPA – Certified Public Accountant, California

**TRAPP, STEPHEN** – Manager, Custodial Services  
A.A., Los Angeles City College  
B.A., California State University, Los Angeles

**TRIBBE, MATTHEW D.** – History  
B.A., University of Cincinnati  
M.A., University of Texas at Austin  
Ph.D., University of Texas at Austin

**TROOP, JANE** – Computer Information Systems  
B.A., California State University, Fullerton  
M.S., California State University, Los Angeles

**TRUJILLO, TAMARA** – English  
B.A., California State University, Northridge

M.A., Arizona State University

**TRUONG, PHAT** - Accounting  
B.S., Rowan University, Glassboro  
M.S., DeVry University, Pomona  
CPA - Certified Public Accountant, California

**TUTTLE, VALERIE** – Reading  
B.S., California State University, Fullerton  
M.S., California State University, Fullerton

## -V-

**VAN RY, MICHELE** – Art  
B.A., University of California, Irvine  
M.F.A., University of California, Irvine

**VANDERVORT, KIM** – English  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

**VERZEANU, RAZVAN** – Mathematics  
B.A., University of Southern California  
M.S., University of California, Irvine

**VO, DAO** – Mathematics  
B.A., University of California, Berkeley  
M.A., California State University, Fullerton

## -W-

**WADE, MARCU** – Cosmetology  
B.S., California State University, Fullerton

**WEBSTER, PERRY** – Physical Education  
A.A., Saddleback College  
B.S., California State University, Fullerton  
M.A., Concordia University

**WIDMANN, PETER** - Physics  
B.S. Loyola Marymount University  
Ph.D., University of Houston

**WILLIS, CHAD** – Music  
B.A., University of North Texas  
M.M., University of Southern California

**WILLIS, MARC** – Earth Science  
B.S., New Mexico Tech  
M.A., Washington University

**WILLOUGHBY, DAN** – Dean, Humanities  
B.A., University of California, Berkeley  
M.S., California State University, Fullerton

**WILSON, DANI** – Dean, Library/Learning Resources and Instructional Support Programs and Services  
B.A., University of California, Santa Barbara  
M.A., California State University, Fullerton  
Ed.D., Argosy University

**WILSON, KELLY** – Mathematics  
B.A., California State University, Fullerton  
M.S., San Diego State University

**WILSON, MARCUS** – Business Management



B.S., University of Southern California  
 M.B.A., University of Southern California  
 J.D., Law Center, University of Southern California

**WOLFE, JEANA G.** – Psychology

A.A., Ventura College  
 B.S., California Polytechnic University, San Luis Obispo  
 M.A., California State University, Northridge

**WOLL, GREG** – Music

M.M., University of North Texas  
 D.M.A., The Claremont Graduate University

**WOOLRIDGE, NANCY** – Computer Information Systems

B.S., Regis College  
 M.S., The Claremont Graduate University

**WU, JO WEN** – Biology

B.S., University of Missouri, Columbia  
 Ph.D., University of California, Irvine

**–Y–****YIMENU, TILAHUN** – Chemistry

B.A., Coppin State College  
 Ph.D., Howard University

**YOUNG, CALVIN** – Biology

B.A., University of California, Berkeley  
 Ph.D., Columbia University

**YOUNG, GILENE M.** – Biology

B.S., Yale University  
 M.S., University of California, Los Angeles  
 Ph.D., University of California, Los Angeles

**–Z–****ZARAGOZA, JUAN** - Mathematics

B.A., University of California, Riverside  
 M.A., University of California, Riverside  
 Ph.D., University of California, Riverside

**ZARSKA, CINDY** – Mathematics

B.A., California State University, Fullerton  
 M.A., California State University, Fullerton

**ZEPEDA, CHARLES** – Automotive Technology

A.A., Fullerton College  
 B.A., California State University, Fullerton

**Faculty Emeritus**

Laura C. Almodovar-Sole	Counseling and Student Development
Behnoosh Armani	Counseling and Student Development
Nadine Arndt	Humanities
Ines Beilke	Counseling and Student Development
Robert E. Berryhill	Technology and Engineering
Nancy Bjorklund	Social Sciences
Lillian A. Blaschke	Natural Sciences

Jacqueline Boll	Dean, Library/Learning Resources
Dr. Jo Ann Cherami Brannock	Social Sciences
Robert Bye	Social Sciences
Lisa Campbell	Dean, Counseling and Student Development
Candice Cantrell	Business and CIS
Connie Carroll	Cosmetology
Arnold D. Caudill	Humanities
Gayle Cebrian	Technology and Engineering
Janice E. Chadwick	Natural Sciences
Daniel Conforti	Social Sciences
Sandro Corsi	Fine Arts
Brian L. Couron	Counseling and Student Development
Steve Credidio	Counseling and Guidance
Steven Dayton	Business and CIS
Sharon DeLeon	Social Sciences
Elise Donley	Mathematics and Computer Science
Cheryl Duhme	Math and Computer Science
Ruth Egigian	Humanities
Carolyn Facer	Mathematics and Computer Science
Nicholas Fuscardio Jr.	Physical Education
Kent A. Gordon	Natural Sciences
Susan Grabiell	Social Sciences
Patricia Green-Pappas	Social Sciences
Bruce Hanson	Philosophy and Religious Studies
Carolyn Heath	Natural Sciences
Bruce Henderson	Humanities
Bernadette Archer Hetland	Counseling and Student Development
David Hogan	Technology and Engineering
Dennis Howey	Technology and Engineering
Mela Hoyt-Heydon	Fine Arts
Michael Holden	Social Sciences
Betty Huck	Natural Sciences
Robert Jaurequi	Counseling and Student Development
Darlene Jensen	Director, Student Affairs
Robert Jensen	Fine Arts
Jeff Jespersion	Physical Education
Joseph Jewell	Music
Kathi Johnson	Humanities
Lena Kane	Technology and Engineering
Charles Ketter	Fine Arts
Richard A. Kirkham	Humanities
Elizabeth Kiszely	Humanities
Gus Klentos	Mathematics and Computer Science
Mark Allen Knoernschild	Humanities
Wei-Ping Kong	Humanities
Gary Krinke	Fine Arts

Diana Kyle	Social Sciences
James J. Linahon	Fine Arts
Adela G. Lopez	Social Sciences
Connie Lopez	Technology and Engineering
Claudia Lowe	Social Sciences
Robert Lundergan	Humanities
Bruce Magee	English
Gene Majors	Math and Computer Science
Carol Mattson	Counseling
Anthony P. Mazzaferro	Fine Arts
Alan McAllister	Business and CIS
Ed McCloud	Business and CIS
Scott McKenzie	Dean, Technology and Engineering
Paul McKinley	Director DSPS and Veterans Resource Center
Richard McMillan	Fine Arts
Cecilia D. Meisenhelder	Counseling and Student Development
Bruce Miller	Fine Arts
Robert Miranda	Dean, Student Support Services
Rosa Molina	Technology and Engineering
Michael Moore	Technology and Engineering
Susan H. Nack	Mathematics and Computer Science
LeVonne Nelson	Social Sciences
Mary C. Nolan-Riegle	Natural Sciences
Cathryn O'Donnell	Humanities
Gerald Padilla	Social Sciences
Elmer Pellegrino	Technology and Engineering
Marie L. Perez	Technology and Engineering
Shirlee Pledger	Humanities
Stephen Plett	Mathematics
Steven M. Pliska	Fine Arts
John Plummer	Technology and Engineering
Sharon Portman	Humanities
Lynette Pratt	Counseling and Student Development
Shawn Quirk	English
Delores Reha	Business and CIS
Joe S. Reyes, Jr.	Counseling and Student Development (EOPS/CARE)
Bonnie Rick	Technology and Engineering
Wallce "Vic" Ritter	Business and CIS
Karen Robinson	Natural Sciences
Carolanne Rodgers	Business and CIS
Karen Rose	Director, Office of Special Projects
Katharin Rundus	Fine Arts
Ricardo Salas	Social Sciences
Derry Seaton	Social Sciences
Charles Schilling	Humanities
Roger See	Physical Education
George Sherman	Natural Sciences

Linda Shideler	Mathematics and Computer Science
Carol G. Shier	Humanities
Ruth Sipple	Disability Support Services
Richard Smead	Business and CIS
Robert Smitson	Technology and Engineering
Nora Spencer	Business and CIS
Dr. Claudia S. Stanger	Humanities
Jerry Stokes	Technology and Engineering
Pamela Tackabury	Humanities
Emily Teipe	Social Sciences
Daniel Tesar	Dean, Social Sciences
David A. Thomas	Technology and Engineering
Patricia Thomas	Humanities
Arienne Turner	Social Sciences
Eleanor M. Uyeda	Business and CIS
Jeffrey Vanderpool	Social Sciences
Olivia Veloz	Director, Academic Support Programs and Services
Sunshine D. Vidal	Counseling and Student Development
Leonard Vincent	Natural Sciences
Violette Vornicel-Guthmann	Humanities
Dr. John T. Walker	Social Sciences
Dr. Peter P. Wan	Social Sciences
Carol Ward	Technology and Engineering
Kathleen Whalen	Dance
Debi Woelke	Physical Education
Greg Woll	Fine Arts
Doris Wright	Technology and Engineering

## Faculty in Memoriam

### Dr. David Cooper

David was a professor of business law and legal government. He taught in the Business Division for more than 20 years. He inspired students, faculty and staff with his positive, supportive attitude and his zest for life, in addition to his commitment to our students.

### Toni DuBois-Walker

As the Vice President of Student Services, Dr. DuBois had been a vital member of the college's leadership team for many years and a true champion for education. She retired due to illness after serving 6½ years at Fullerton College. Prior to coming to Fullerton College in 2005, she was the Dean of Financial Aid, EOPS and Veterans Services at Long Beach City College. She earned a Bachelor's Degree in Communication, a Master's Degree in Counseling from California State University, Long Beach, and a Ph.D. in Community College Leadership from Walden University. In honor of her service and commitment to Fullerton College, the Chris Lamm Memorial Food Bank has been renamed the Chris Lamm and Toni DuBois-Walker Memorial Food Bank.

### Chris Lamm

Chris joined the Child Development & Educational Studies faculty at Fullerton College in 1974 and left to become Dean of the Children's Programs at Pacific Oaks College in 1988. She returned to Fullerton College

in the fall of 1992. Chris directed the Laboratory School at Fullerton from 1974 until 1988, and when she returned in 1992 she was instrumental in founding the Anti-bias Collaborative, Kindercaminata, Faces of Fullerton, and the Fullerton College Food Bank.

### **Dr. Kenneth "Ken" Meehan**

**Ken** was the Director of Institutional Research and Planning. Ken was well respected on this campus and statewide for his knowledge and expertise in the field of research and planning. He will be missed by us all for his passion for community colleges, love for life, sense of humor, and fighting spirit.

### **Amanda Rachel Walzer**

Amanda was a tenured professor in the English Department at Fullerton College. Amanda was voted "Most Outspoken" in her senior class in high school, and graduated Phi Beta Kappa with a B.A. in English from UCLA (1994). She also held an M.F.A. in Creative Writing from Antioch University (2000) and a Certificate in Postsecondary Reading and Learning from Cal State Fullerton (2013). She knew she wanted to be a teacher when, at the age of ten, she found herself admiring her sixth grade teacher's lesson planning. She started her teaching career as a writing center tutor while at UCLA, and then did a stint as a high school English teacher in Los Angeles. After earning her Masters, she taught at UCLA, East L.A. College, and Pasadena City College before coming to Fullerton. During her time at Fullerton, she delighted in teaching English & Creative Writing at FC and serving as the Faculty Advisor for LiveWire, FC's Online Literary Arts Journal. Amanda lived in Fullerton with her two sons and their dog, Max. She enjoyed weekends in San Diego with her love, John Warshawsky. In her spare time, she ran track, played soccer, wrote, sang, and played her own songs on the piano.

### **Robert Yamaguchi**

Robert started his tenure at Fullerton College in 1994 teaching Business Management courses and then went on to teach in the International Business program. Robert was dedicated to providing excellent instruction to his students. He was fluent in both French and Japanese and conversant in Italian and Spanish. He combined his language skills with his love of foreign travel and was able to enrich his student lectures with very relevant views of international business. He was the advisor for Phi Beta Lambda for many years and was awarded the CCCAOE award for Excellence in Leadership in 2001. Robert was also the author of several books. Robert's presence on the Fullerton College campus will indeed be missed by students, faculty and staff.

## Fullerton College Administration

President (Interim)	Gilbert Contreras, Ph.D.
Vice President, Administrative Services	Rodrigo Garcia, M.A.
Vice President, Instruction	Jose Ramon Nunez, Ph.D.
Vice President, Student Services	Gilbert Contreras, Ph.D.
Dean, Business, Computer Information Systems	Carlos Ayon, M.A.
Dean, Counseling and Student Development	Jennifer LaBounty, Ed.D.
Dean, Enrollment Services	Albert Abutin, Ed.D.
Dean, Fine Arts	John Tebay, M.M.
Dean, Humanities	Dan Willoughby, M.S.
Dean, Library/Learning Resources, Instructional Support Programs and Services	Dani Wilson, Ed.D.
Dean, Mathematics and Computer Science	Mark Greenhalgh, M.A.
Dean, Natural Sciences (Interim)	Bridget Salzameda, Ph.D.
Dean, Physical Education	David Grossman, Ed.D.
Dean, Social Sciences	Jorge Gamboa, Ed.D.
Dean, Student Support Services/ Title IX Coordinator	Elaine Lipiz Gonzalez, Ed.D.
Dean, Technology and Engineering	Ken Starkman, M.S.
Director, Admissions and Records	Rena Martinez Stluka
Director, Academic Support Programs	Kristine Nikkhoo, M.A.
Director, Athletics	Scott Giles, M.S.
Director, Behavioral Health Services (Interim)	Dana Timmermans
Director, Bookstore	Nick Karvia, B.A.
Director, Transfer Center	Cecilia Arriaza, M.A.
Director, Campus Communications	Lisa McPheron, M.A.
Director, Campus Health Services	(Vacant)
Director, Campus Safety	Steve Selby, B.S.
Director, Disability Support Services	Edward Roth, Ph.D.
Director, Educational Partnerships and Programs	Ericka Adakai, M.S.
Director, EOPS/CARE, CalWORKs and FYSI	Sonia Duran, M.A.
Director, Financial Aid	Greg Ryan, M.A.
Director, Grants/Economic and Workforce Development	Monica Martin, M.Ed.
Director, Office of Institutional Effectiveness (Interim)	(Vacant)
Director, Physical Plant/Facilities	Larry Lara, B.S.
Director, Special Projects - Career and Technical Education	Martha Payan-Hernandez, M.A.
Director, Special Projects - Pledge/Promise	Deniz Fierro, M.Ed.
Director, Student Life and Leadership	Naomi Abesamis, MBA

Manager, Academic Computing Technologies	Co Ho, M.B.A.
Manager, Campus Accounting	Cyndi Grein, B.S.
Manager, Assistant - Campus Capital Projects	Megan Moscol, B.S.
Manager, Campus Capital Projects	Oscar Saghieh, BSCE
Manager, Custodial Services	Stephen Trapp, B.A.
Manager, Embedded Tutoring	Jessica Johnson, B.S.
Manager, International Student Center (Interim)	Alexander Brown, M.S.
Manager, Maintenance and Operations	Randy Harris, A.A.
Manager, Special Projects - Child Development Lab	Sonia Semana, M.A.
Manager, Special Projects - UMOJA	Brandi Avila, M.A.

## Fullerton College Organizational Structure

### President, Acting Dr. Gilbert Contreras

**Vice President, Administrative Services**  
**Vice President, Instruction**  
**Vice President, Student Services**  
**Campus Communications**  
**Institutional Research and Planning**

### Vice President, Administrative Services Rodrigo Garcia

**Academic Computing - Co Ho, Manager, Systems Technology Services**  
**Bookstore - Nick Karvia, Director**  
**Business Office**  
**Campus Accounting**  
**Campus Capital Projects**  
**Campus Dining**  
**Mailroom**  
**Physical Plant and Facilities - Larry Lara, Director**

- Maintenance and Operations - Randy Harris, Manager
- Custodial Services - Stephen Trapp, Manager

### Vice President, Instruction Dr. José Ramón Nuñez

**Business/Computer Information Systems (CIS) - Carlos Ayon, Dean**

- Economic and Workforce Development

**Fine Arts - John Tebay, Dean**

**Humanities - Dan Willoughby, Dean**

**Library/Learning Resources, Instructional Support Programs and Services - Dr. Dani Wilson, Dean**

- Academic Support Center
- Basic Skills

- Honors Program
- Hornets Tutoring
- Library
- Staff Development
- Study Abroad

**Mathematics and Computer Science - Mark Greenhalgh, Dean**

**Natural Sciences - Dr. Bridget Salzameda, Interim Dean**

**Physical Education - Dr. David Grossman, Dean**

- Athletics - Scott Giles, Director

**Social Sciences - Dr. Jorge Gamboa, Dean**

**Technology and Engineering - Kenneth Starkman, Dean**

- Career Education - Martha Payán Hernández, Director

- Enrollment Management
  - Athletic Eligibility and Compliance
  - Data Integrity Analysis and Oversight
  - State and Federal Reporting
- Financial Aid
  - Bank Mobile
  - California College Promise Grant (Fee Waiver)
  - California Dream Act Application
  - Default Prevention Initiative
  - Federal Direct Loans
  - Federal Grants
  - Financial Aid Counseling
  - Financial Literacy and Wellness
  - Federal Work-Study and Student Employment
  - FA Outreach and In-reach
  - Fraud Prevention
  - Free Application for Federal Student Aid
  - Homeless Liaison
  - State Grants and Cal Grant
    - Veterans Fee Waiver
- International Student Center
  - Admissions
  - Visa Advising
  - Academic Advising
  - New Student Orientation
  - Field Trips and Events

**Student Support Services - Dr. Elaine Lipiz Gonzalez, Dean**

- Associated Students
- Behavioral Intervention Team (BIT)
- CalWORKs
- DSS (Disability Support Services)
- EOPS/CARE
- Food Bank
- Foster Youth
- Student Activities
- Student Conduct
- Title IX
- Veterans Resource Center

**Director, Campus Communications  
Lisa McPheron**

**Director, Institutional Research and Planning  
(Vacant)**

**Vice President, Student Services  
Dr. Gilbert Contreras**

**Counseling and Student Development - Dr. Jennifer LaBounty, Dean**

- Assessment Center
- Career Center
- Counseling
  - Career Technical Education (CTE)
  - Educational Partnerships and Outreach
  - Honors Program
  - Outreach
  - Promise
  - Puente
  - Re-Entry Connect
  - STEM (Science, Technology, Engineering and Mathematics)
  - Student Development and Engagement - Director, (Vacant)
    - ANNAPISI
    - Cadena Center
    - Grads2Be
    - LGBTQIA+
    - Umoja
  - Transfer Center

**Enrollment Services - Dr. Albert Abutin, Dean**

- Admissions and Records
  - Admission Applications
  - A&R Petitions
  - Document Retention
  - Graduation Evaluations
  - myGateway Registration Technical Support
  - Other College Transcript Evaluations
  - Priority Registration
  - Special Admit
  - Transcripts
  - Verifications

## General Education Requirements for Transfer to a University

- General Education Certification (p. 502)
- California State University and University of California Campus Specific General Education/Breadth Requirements (p. 502)
- California State University Transfer Admission Requirements (p. 508)
- University of California Transfer Admission Requirements (p. 508)
- Intersegmental General Education Transfer Curriculum (p. 509)
- Educational Objective - Transfer (p. 514)

THE INFORMATION CONTAINED IN THIS SECTION OF THE CATALOG IS CORRECT TO THE BEST OF OUR KNOWLEDGE AT THE TIME OF PUBLICATION. IT IS STRONGLY RECOMMENDED THAT STUDENTS CONSULT WITH A COUNSELOR BEFORE MAKING FINAL ACADEMIC/VOCATIONAL DECISIONS. FOR TRANSFER INFORMATION REGARDING SPECIFIC SCHOOLS OR PROGRAMS, EITHER A FULLERTON COLLEGE COUNSELOR OR THE COLLEGE OR UNIVERSITY IN QUESTION CAN BE CONSULTED FOR MORE DETAILED INFORMATION.

## General Education Certification

Fullerton College is authorized to offer two general education certification patterns. The CSU GE Breadth Certification (p. 502) is a 39 unit pattern which fulfills the lower division general education requirements for the Bachelor Degree at the California State University.

The IGETC (p. 509) (Intersegmental General Education Transfer Curriculum) is a 37-39 unit pattern which fulfills the lower division general education requirements for the Bachelor Degree at either the University of California or the California State University.

Certification means Fullerton College has determined these requirements have been met and a notation is made on the transcript. If the student transfers without certification, the university may require the student to complete additional lower division general education.

There are no catalog rights for certification. A course must be on the appropriate general education list at the time it is successfully completed.

**Important Note:** Selecting a general education plan is an issue that must be planned carefully. Certification is not always advantageous to all students. It is critical that all students planning to transfer to a university seek guidance from an academic counselor. Students not seeking guidance may complete inappropriate courses, thus complicating or delaying transfer to the university.

Students who complete either general education certification requirements need to request an evaluation to be included with the transcript when it is sent to the university. (Refer to Transcript of Record (p. 53) for additional information.)

## California State University and University of California Campus Specific General Education/Breadth Requirements

There are several ways that a transfer student may fulfill the CSU and UC lower-division general education requirements prior to transfer. Depending on a student's major and field of interest, the student may find it better to take courses fulfilling those of the transfer campus or college to which the student plans to transfer. Students pursuing majors that require extensive lower-division preparation may not find the Intersegmental General Education Transfer Curriculum or the CSU General Education Certification option to be advantageous.

Students are urged to consult the CSU or UC campus catalog; consult with their FC academic counselor; and use the FC Counseling Resource Center or the Cadena/Transfer Center to obtain additional information regarding CSU and UC campus specific transfer general education course patterns and lists.

For CSU GE Certification: AREA A1, A2, A3 and B4 must have grades of C or better.

Code	Title	Units
<b>AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING (9 semester or 12-15 quarter units).</b>		<b>9-12</b>
<i>One 3-unit course is required from each section.</i>		
<i>Area A1: Oral</i>		
BUS 112 F	Public Speaking for Business (beg F'16)	4
COMM 100 F	Public Speaking	3
COMM 124 F	Small Group Communication	3
COMM 135 F	Essentials of Argumentation <sup>1</sup>	3
<i>Area A2: Written</i>		
ENGL 100 F	College Writing or ENGL 100HF Honors College Writing	4
ENGL 101 F	Enhanced College Writing	5
ENGL 110 F	Enhanced College Writing for Non-Native Speakers	5
<i>Area A3: Critical Thinking</i>		
COMM 135 F	Essentials of Argumentation <sup>1</sup>	3
ENGL 103 F	Critical Reasoning and Writing or ENGL 103HF Honors Critical Reasoning and Writing	4
ENGL 104 F	Critical Thinking and Writing About Literature	4
ENGL 201 F	Intermediate College Writing	3
PHIL 170 F	Logic and Critical Thinking	3
PHIL 172 F	Critical Thinking and Writing	3
READ 142 F	College Reading: Logical Analysis and Evaluation	3
<b>AREA B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING (9 semester or 12-15 quarter units minimum)</b>		<b>9-14</b>

*One lecture course is required from each section. One matching lab must be included for Physical Science or Life Science if lecture and lab are taken separately. NOTE: Some colleges may require two lab courses if student is not fully certified.*

**B1: Physical Science**

CHEM 100 F	Chemistry for Daily Life <sup>3</sup>	4
CHEM 101 F	Chemistry for Allied Health Science <sup>3</sup>	5
CHEM 103 F	Chemistry in a Changing World	3
CHEM 107 F	Preparation for General Chemistry <sup>3</sup>	5
CHEM 111AF	General Chemistry I <sup>3</sup>	5
CHEM 111BF	General Chemistry II (beg F'15) <sup>3</sup>	5
ESC 100 F	Physical Geology	3
ESC 101 F	Earth Science Survey	3
ESC 103 F	Historical Geology <sup>3</sup>	4
ESC 104 F	Geology of National Parks and Monuments	3
ESC 105 F	Introduction to Weather and Climate	3
ESC 107 F	Earth Science for Educators <sup>3</sup>	4
ESC 110 F	Introduction to Climate Science	3
ESC 116 F	Astronomy	3
or ESC 116HF	Honors Astronomy	
ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 190 F	Environmental Geology	3
GEOG 102 F	Physical Geography	3
or GEOG 102HF	Honors Physical Geography	
PHYS 120 F	Relativity for Poets	3
PHYS 130 F	Elementary Physics <sup>3</sup>	4
PHYS 205 F	Physics for the Life Sciences I <sup>3</sup>	4
PHYS 206 F	Physics for the Life Sciences II <sup>3</sup>	4
PHYS 210 F	Physics with Calculus for the Life Sciences I <sup>3</sup>	4
PHYS 211 F	Physics with Calculus for the Life Sciences II <sup>3</sup>	4
PHYS 221 F	General Physics I <sup>3</sup>	4
PHYS 222 F	General Physics II <sup>3</sup>	4
PHYS 223 F	General Physics III <sup>3</sup>	4
<b>B2: Life Science</b>		
ANAT 231 F	General Human Anatomy <sup>3</sup>	4
ANAT 240 F	Human Physiology <sup>3</sup>	5
ANTH 101 F	Physical Anthropology	3
or ANTH 101HF	Honors Physical Anthropology	
BIOL 100 F	Principles of Biology	4
BIOL 101 F	General Biology <sup>3</sup>	5
or BIOL 101HF	Honors General Biology	
BIOL 102 F	Human Biology	3
BIOL 104 F	Biology of Insects and Spiders	3
BIOL 108 F	Plants and People	3
BIOL 109 F	Genetics and Biotechnology in Society	3
BIOL 141 F	Marine Mammal Biology and Conservation	3
BIOL 170 F	Organismal Biology <sup>3</sup>	5
BIOL 190 F	Introduction to Biotechnology	3
BIOL 222 F	Marine Biology <sup>3</sup>	3
BIOL 266 F	General Zoology <sup>3</sup>	5
BIOL 268 F	General Botany <sup>3</sup>	5
BIOL 272 F	Cell and Molecular Biology <sup>3</sup>	4

BIOL 274 F	General Ecology <sup>3</sup>	4
ENVS 105 F	Environmental Biology	3
HORT 152 F	Applied Botany <sup>3</sup>	4
HORT 205 F	Applied Entomology <sup>3</sup>	3
HORT 207 F	Plant Pathology <sup>3</sup>	3
MICR 220 F	Medical Microbiology <sup>3</sup>	4
MICR 262 F	General Microbiology <sup>3</sup>	5

**B3: Laboratory Activity**

ANTH 101LF	Physical Anthropology Lab	1
BIOL 102LF	Human Biology Laboratory	1
BIOL 190LF	Introduction to Biotechnology Lab	1
ESC 100LF	Physical Geology Lab <sup>3</sup>	1
ESC 101LF	Earth Science Survey Lab <sup>3</sup>	1
ESC 105LF	Introduction to Weather and Climate Laboratory	1
ESC 116LF	Astronomy Lab <sup>3</sup>	2
ESC 130LF	Introduction to Oceanography: Field Experience <sup>3</sup>	1
ENVS 105LF	Environmental Biology Lab <sup>3</sup>	1
GEOG 102LF	Physical Geography Laboratory <sup>3</sup>	1

**B4: Mathematics/Quantitative Reasoning**

BUS 101 F	Personal Financial Management (beg F'20)	3
BUS 151 F	Business Mathematics (beg F'20)	3
MATH 100 F	Liberal Arts Mathematics	3
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
MATH 121 F	Enhanced Introductory Probability and Statistics	5
MATH 129 F	College Algebra for Business Calculus	4
MATH 130 F	Calculus for Business	4
MATH 141 F	College Algebra	4
or MATH 141HF	Honors College Algebra	
MATH 142 F	Trigonometry	4
MATH 143 F	Enhanced College Algebra	5
MATH 151 F	Calculus I (formerly MATH 150AF)	4
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
MATH 170 F	Discrete Structures	4
MATH 171 F	Discrete Mathematics	4
MATH 172 F	Graph Theory and Linear Algebra	4
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
PSY 161 F	Elementary Statistics for Behavioral Science (beg F'13)	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
SOSC 120 F	Introduction to Probability and Statistics	4

**AREA C: ARTS AND HUMANITIES (9 semester or 12-15 quarter units minimum)****9-13****ART 196HF, MUS 196HF, and THEA 196HF count as one course.** <sup>5</sup>**C1: Arts**

ART 100 F	Fundamentals of Art	
ART 110 F	Introduction to Art	
ART 112 F	Art History - Ancient to Medieval	
ART 113 F	Art History - Renaissance to Modern	
or ART 113HF	Honors Art History - Renaissance to Modern	
ART 114 F	Art History - Impressionism to Present	
ART 116 F	Art History - The Art of Mexico	
ART 117 F	Art History - American Art	
ART 118 F	Color Theory	
ART 120 F	Basic Design	
ART 121 F	Three-Dimensional Design	
ART 153 F	Ceramics - Beginning Handbuilding (formerly ART 150AF)	
ART 154 F	Ceramics - Beginning Throwing	
ART 160 F	Fundamentals of Sculpture (beg F'13)	
ART 174 F	Beginning Jewelry Fabrication	
ART 179 F	Drawing for Non-Art Majors	
ART 182 F	Basic Drawing	
ART 184 F	Expressive Drawing	
ART 196HF	Honors Creative Arts - Art	3
ART 211 F	Women in the Arts	3
ART 212 F	Art History - The Art of Asia	3
ART 213 F	Art History: Pre-Columbian Art	3
CRTV 120 F	Media Aesthetics	3
CRTV 121 F	American Cinema to the 1960s	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema 1946 to Present	3
CRTV 131 F	Contemporary American Cinema (formerly Contemporary Cinema)	3
DANC 100 F	Dance Appreciation (beg F'19)	3
DANC 120 F	Dance History	3
DANC 200 F	Dance Appreciation - A Classical Ballet Retrospective	3
DANC 210 F	Multicultural Dance in the U.S. Today	3
ENGL 208 F	Introduction to Film Studies	3
MUS 101 F	Music Fundamentals	3
MUS 106 F	Introduction to College Music Theory	3
MUS 107 F	Music Theory I (formerly Harmony)	3
MUS 110 F	Electronic Music I: Beginning Music Production	3
MUS 113 F	Jazz History - An Appreciation	3
MUS 116 F	Music Appreciation	3
MUS 118 F	Introduction to Opera	3
MUS 119 F	History of Rock Music	3
MUS 120 F	Survey of Music History	3
MUS 196HF	Honors Creative Arts - Music	3
PHOT 101 F	Introduction to Photography	3
PHOT 111 F	Introduction to Photography from Analog to Digital (beg F'14)	3

THEA 100 F	Introduction to the Theatre	3
THEA 104 F	Introduction to Theatre Appreciation	3
THEA 105 F	Musical Theatre History	3
THEA 127 F	Oral Interpretation	3
THEA 196HF	Honors Creative Arts - Theatre	3

**C2: Humanities (Literature, Philosophy, Languages Other than English):**

CDES 242 F	Introduction to Liberal Studies (beg F'13)	3
CHIN 101 F	Elementary Chinese - Mandarin I	5
CHIN 102 F	Elementary Chinese - Mandarin II	5
CHIN 203 F	Intermediate Chinese - Mandarin III	4
CHIN 204 F	Intermediate Chinese - Mandarin IV	4
ENGL 102 F	Introduction to Literature	3
or ENGL 102HF	Honors Introduction to Literature	
ENGL 105 F	Introduction to Creative Writing	3
ENGL 203 F	Introduction to Dramatic Literature	3
ENGL 204 F	Introduction to Poetry	3
ENGL 207 F	The Short Story	3
ENGL 210 F	Introduction to Language Structure and Use (beg F'12)	3
ENGL 211 F	British Literature to 1800	3
or ENGL 211HF	Honors British Literature to 1800	
ENGL 212 F	British Literature since 1800	3
or ENGL 212HF	Honors British Literature since 1800	
ENGL 221 F	American Literature to the Civil War	3
or ENGL 221HF	Honors American Literature to the Civil War	
ENGL 222 F	American Literature from the Civil War to the Present	3
or ENGL 222HF	Honors American Literature from the Civil War to the Present	
ENGL 224 F	World Literature through the Early Modern Period	3
or ENGL 224HF	Honors World Literature through the Early Modern Period	
ENGL 225 F	World Literature since the Early Modern Period	3
or ENGL 225HF	Honors World Literature since the Early Modern Period	
ENGL 234 F	Introduction to Shakespeare	3
or ENGL 234HF	Honors Introduction to Shakespeare	
ENGL 239 F	Survey of Children's Literature	3
ENGL 240 F	Survey of Young Adult Literature	3
ENGL 243 F	Folklore and Mythology	3
or ENGL 243HF	Honors Folklore and Mythology	
ENGL 245 F	The Bible as Literature	3
ENGL 246 F	The Novel	3
ENGL 248 F	Science Fiction	3
ENGL 249 F	Survey of Chicano/a Literature	3
ENGL 251 F	Survey of Native American Literature	3
ETHS 130 F	African-American History I (beg F'02)	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) (beg F'21)	3
FREN 101 F	Elementary French I	5
FREN 102 F	Elementary French II	5



FREN 203 F	Intermediate French III	4	PHIL 210 F	Introduction to Judaism	3
FREN 204 F	Intermediate French IV	4	PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3
GERM 101 F	Elementary German I	5	PHIL 225 F	The American Religious Experience (beg F'16)	3
GERM 102 F	Elementary German II	5	PHIL 250 F	The Religion of Islam	3
GERM 203 F	Intermediate German III	4	PHIL 270 F	Introduction to Asian Religions	3
GERM 204 F	Intermediate German IV	4	PORT 101 F	Elementary Portuguese I	5
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I) (beg F'15) <sup>1</sup>	3	PORT 102 F	Elementary Portuguese II	5
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)		SPAN 101 F	Elementary Spanish I	5
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II) (beg F'15) <sup>1</sup>	3	or SPAN 101HF	Honors Elementary Spanish I	
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)		SPAN 102 F	Elementary Spanish II	5
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) (beg F'02) <sup>1</sup>	3	or SPAN 102HF	Honors Elementary Spanish II	
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)		SPAN 201 F	Spanish for the Spanish Speaker	5
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) (beg F'02) <sup>1</sup>	3	SPAN 203 F	Intermediate Spanish III	4
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)		SPAN 204 F	Intermediate Spanish IV	4
HIST 154 F	Ancient Egypt <sup>1</sup>	3	SPAN 205 F	Introduction to Spanish Literature	3
HIST 170 F	History of the United States to 1877 (formerly History of the United States I) (beg F'16) <sup>1,4</sup>	3	SPAN 206 F	Introduction to Latin American Literature	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)		SPAN 207 F	Children's Literature/Spanish	3
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) (beg F'16) <sup>1,4</sup>	3	THEA 109 F	Modern Dramatic Literature	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)		<b>AREA D: SOCIAL SCIENCES (2 courses - 6 semester or 8 quarter units minimum)</b>		<b>6-8</b>
HIST 270 F	Women in United States History <sup>1,4</sup>	3	ANTH 102 F	Cultural Anthropology	3
ITAL 101 F	Elementary Italian I	5	or ANTH 102HF	Honors Cultural Anthropology	
ITAL 102 F	Elementary Italian II	5	ANTH 103 F	Introduction to Archaeology	3
ITAL 203 F	Intermediate Italian III	4	or ANTH 103HF	Honors Introduction to Archaeology	
ITAL 204 F	Intermediate Italian IV	4	ANTH 105 F	Language and Culture	3
JAPN 101 F	Elementary Japanese I	5	ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	3
JAPN 102 F	Elementary Japanese II	5	or ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	
JAPN 203 F	Intermediate Japanese III	4	ANTH 209 F	Cultures of Latin America	3
JAPN 204 F	Intermediate Japanese IV	4	ANTH 211 F	Celtic Cultures	3
PHIL 100 F	Introduction to Philosophy	3	ANTH 215 F	Global Issues in Anthropological Perspective <sup>2</sup>	3
or PHIL 100HF	Honors Introduction to Philosophy		BUS 100 F	Introduction to Business (beg F'18)	3
PHIL 101 F	Introduction to Religious Studies	3	BUS 131 F	Principles of International Business (beg F'18)	3
PHIL 105 F	World Religions	3	BUS 162 F	Business Economics (beg F'18)	3
or PHIL 105HF	Honors World Religions		COMM 105 F	Interpersonal Communication (beg F'20)	3
PHIL 135 F	Social and Political Philosophy	3	CDES 120 F	Child Development <sup>1</sup>	3
PHIL 160 F	Introduction to Ethics	3	CDES 201 F	Child in the Home and Community (beg F'21) <sup>2</sup>	3
PHIL 195 F	Women's Issues in Philosophy	3	ECON 101 F	Principles of Economics - Micro	3
PHIL 200 F	Introduction to Christianity	3	or ECON 101HF	Honors Principles of Economics - Micro	
PHIL 201 F	History of Philosophy - Ancient and Medieval	3	ECON 102 F	Principles of Economics - Macro	3
PHIL 202 F	History of Philosophy - Modern and Contemporary	3	or ECON 102HF	Honors Principles of Economics-Macro	
			ETHS 101 F	American Ethnic Studies <sup>4</sup>	3
			or ETHS 101HF	Honors American Ethnic Studies	
			ETHS 111 F	Women of Color in the U.S. <sup>2</sup>	3
			ETHS 129 F	Introduction to African-American Studies	3
			ETHS 130 F	African-American History I <sup>1,4</sup>	3
			ETHS 131 F	African-American History II <sup>4</sup>	3

ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3	or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3	HIST 190 F	History of the Americas I (formerly HIST 162AF) <sup>4</sup>	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F) <sup>4</sup>	3	HIST 191 F	History of the Americas II (formerly HIST 162BF) <sup>4</sup>	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3	HIST 270 F	Women in United States History <sup>1,4</sup>	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues		HIST 273 F	United States Environmental History <sup>2</sup>	3
ETHS 159 F	Introduction to American Indian Studies <sup>2</sup>	3	HIST 275 F	History of California	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) <sup>1,4</sup>	3	JOUR 110 F	Mass Media Survey	3
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3	or JOUR 110HF	Honors Mass Media Survey	
ETHS 171 F	Asian Pacific Islander American History	3	PE 250 F	Sports and Society (beg F'14)	3
ETHS 202 F	Race, Ethnicity and Pop Culture <sup>2</sup>	3	POSC 100 F	American Government <sup>4</sup>	3
ETHS 235 F	Contemporary Social Justice Movements	3	or POSC 100HF	Honors American Government	
or ETHS 235HF	Honors Contemporary Social Justice		POSC 110 F	Contemporary American Politics	3
GEOG 100 F	Global Geography	3	or POSC 110HF	Honors Contemporary American Politics	
or GEOG 100HF	Honors Global Geography		POSC 120 F	Introduction to Political Theory	3
GEOG 120 F	Global Environmental Problems	3	POSC 150 F	California Government and Politics	3
GEOG 130 F	California Geography	3	POSC 200 F	Introduction to the Study of Politics	3
GEOG 160 F	Cultural Geography	3	POSC 215 F	Comparative Politics	3
GEOG 262 F	Economic Geography	3	POSC 216 F	Government and Politics of the Middle East	3
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I) <sup>1</sup>	3	POSC 220 F	Introduction to Public Administration (beg Spr'07)	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)		POSC 230 F	Introduction to International Relations	3
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II) <sup>1</sup>	3	POSC 250 F	Gender and Politics <sup>2</sup>	3
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)		POSC 275 F	Introduction to Public Law	3
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) <sup>1</sup>	3	PSY 101 F	General Psychology	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)		or PSY 101HF	Honors General Psychology	
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) <sup>1</sup>	3	PSY 131 F	Cross Cultural Psychology	3
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)		PSY 145 F	Child Psychology	3
HIST 127 F	Survey of United States History (formerly Survey of American History) <sup>4</sup>	3	PSY 202 F	Research Methods in Psychology	4
HIST 151 F	Survey of British History I	3	or PSY 202HF	Honors Research Methods in Psychology	
HIST 152 F	Survey of British History II	3	PSY 221 F	The Brain and Behavior	3
HIST 154 F	Ancient Egypt <sup>1</sup>	3	PSY 222 F	Abnormal Psychology	3
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3	PSY 251 F	Social Psychology	3
HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3	or PSY 251HF	Honors Social Psychology	
HIST 165 F	Introduction to the Middle East	3	SOC 101 F	Introduction to Sociology	3
or HIST 165HF	Honors Introduction to the Middle East		or SOC 101HF	Honors Introduction to Sociology	
HIST 170 F	History of the United States to 1877 (formerly History of the United States I) <sup>1,4</sup>	3	SOC 102 F	Social Problems	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)		SOC 201 F	Dying and Death	3
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) <sup>1,4</sup>	3	SOC 230 F	Sociology of Gender	3
			or SOC 230HF	Honors Sociology of Gender	
			SOC 250 F	Sociology of Aging	3
			SOC 275 F	Marriage and Family	3
			or SOC 275HF	Honors Marriage and Family	
			SOC 277 F	Sociology of Religion	3
			or SOC 277HF	Honors Sociology of Religion	
			SOC 280 F	Media, Culture and Society	3
			SOC 285 F	Drugs and Society	3
			or SOC 285HF	Honors Drugs and Society	
			SOC 290 F	Sociology of Race and Ethnicity	3
			or SOC 290HF	Honors Sociology of Race and Ethnicity	
			SOC 292 F	Introduction to Criminology	3

or SOC 292HF	Honors Introduction to Criminology	
SOSC 125 F	Introduction to Research Methods	3
SOSC 130 F	Introduction to LGBTQ Studies	3
WMNS 100 F	Introduction to Women's Studies	3
or WMNS 100HF	Honors Introduction to Women's Studies	
<b>AREA E: LIFELONG LEARNING AND SELF-DEVELOPMENT (3 semester or 4-5 quarter units minimum)</b>		<b>3-4</b>
BUS 108 F	Living in an Online World <sup>2</sup>	3
CDES 120 F	Child Development <sup>1</sup>	3
CIS 100 F	Introduction to Personal Computers (beg F'13)	4
COMM 120 F	Intercultural Communication	3
COUN 135 F	Introduction to Leadership Development (beg F'15)	3
COUN 151 F	Career and College Success (formerly Career/Life Planning)	3
COUN 163 F	Personal Growth and Life Success	3
HED 140 F	Health Science	3
MIND 101 F	The Practice of Mindfulness and Self-Compassion	3
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
NUTR 220 F	Sports Nutrition <sup>2</sup>	3
PSY 120 F	Human Sexuality	3
PSY 139 F	Developmental Psychology - Life Cycle	3
PE 243 F	Stress Management	3
PE 244 F	Techniques and Principles of Coaching	3
PE 247 F	Sports Management	3
PE 248 F	Psychology of Sport	3
PE 266 F	Fitness for Living (formerly Physical Fitness as a Lifelong Concept)	3
WELL 230 F	The Body-Mind Connection	3
<i>Only one unit from any PE activity courses including DANC, REC, and WELL listed below is applicable to AREA E:</i>		
DANC 101 F	Introduction to Dance World Cultures (beg F'14)	1
DANC 102 F	Conditioning for Dance	2
DANC 103 F	Dance Technique I	1
DANC 104 F	Dance Technique II	1
DANC 111 F	Jazz I	1
DANC 113 F	Tap Dance I	1
DANC 114 F	Tap Dance II (beg F'14)	1
DANC 115 F	Hip Hop Dance I	1
DANC 116 F	Social Dance	1
DANC 119 F	Dance for Theatre	1
DANC 121 F	Classical Dance Fundamentals	1
DANC 122 F	Middle Eastern Dance (beg F'08)	1
DANC 130 F	Afro-Caribbean Dance	1
DANC 132 F	Flamenco Dance I	1
DANC 140 F	Introduction to Ballet	2
DANC 141 F	Ballet I - Beginning Ballet	2
DANC 142 F	Ballet II - Advanced Beginning Ballet	2
DANC 143 F	Ballet III - Intermediate Ballet	2

DANC 150 F	Commercial Dance (beg F'08)	1
DANC 151 F	Latin Jazz (beg F'08)	1
DANC 160 F	Introduction to Modern Dance	2
DANC 161 F	Beginning Modern Dance (formerly DANC 107 F)	2
DANC 162 F	Advanced Beginning Modern Dance (formerly DANC 108 F)	2
DANC 163 F	Intermediate Modern Dance	2
DANC 202 F	Dance Composition/Choreography	3
DANC 203 F	Dance Production (beg F'08)	2
DANC 214 F	Dance Repertory	2
WELL 242 F	Stress Management and Relaxation Training	2

**AREA F: ETHNIC STUDIES - 3 units minimum**

**NOTE: This area is for students beginning the Fall 2021 term or later.**

*. NEW STUDENTS starting at Fullerton College BEGINNING FALL 2021 OR LATER, or returning students who have lost/broken continuous enrollment prior to the 2021-2022 academic year, MUST COMPLETE AREA F, 3 semester units. Should consult with a counselor to discuss this requirement or seek options at other institutions.*

ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues	

*. STUDENTS STARTING at Fullerton College BEFORE FALL 2021 and have maintained continuous enrollment DO NOT NEED TO COMPLETE AREA F. Students should defer to the previous CSU GE-B requirements (i.e., needing 3 courses/9 units in Social Sciences/Area D).*

<sup>1</sup> Course can only be used in ONE area (from AREA A to E)

<sup>2</sup> Course new for 2020-2021

<sup>3</sup> This course satisfies the Area B3 laboratory requirement.

<sup>4</sup> Course may be used to meet the U.S. History, Constitution and American Ideals Requirement.

Code	Title	Units
<b>THE UNITED STATES HISTORY, CONSTITUTION AND AMERICAN IDEALS CSU GRADUATION REQUIREMENT may be met by completing 6 semester or 8-10 quarter units from the following two categories:</b>		
<i>(1) U.S. History (1 course required from the following):</i>		
ETHS 101 F	American Ethnic Studies <sup>1,2</sup>	3
or ETHS 101HF	Honors American Ethnic Studies	
ETHS 130 F	African-American History I <sup>3</sup>	3
ETHS 131 F	African-American History II <sup>2</sup>	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F) <sup>2</sup>	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) <sup>2</sup>	3
HIST 127 F	Survey of United States History (formerly Survey of American History) <sup>2</sup>	3

HIST 170 F	History of the United States to 1877 (formerly History of the United States I) <sup>3</sup>	3
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)	
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) <sup>3</sup>	3
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)	
HIST 190 F	History of the Americas I (formerly HIST 162AF) <sup>2</sup>	3
HIST 191 F	History of the Americas II (formerly HIST 162BF) (beg F'15) <sup>2</sup>	3
HIST 270 F	Women in United States History <sup>3</sup>	3
<i>These units may also be used to meet 6 of the 9-unit AREA C or AREA D requirements if applicable) AND</i>		
2) U.S. Government (required):		
POSC 100 F	American Government <sup>2</sup>	3
or POSC 100HF	Honors American Government	

<sup>1</sup> Course new for 2020-2021

<sup>2</sup> Courses are also listed in Area D

<sup>3</sup> Courses are also listed in both Area C2 and Area D.

### FULLERTON COLLEGE 2020-2021 California State University General Education

- **IMPORTANT NOTE:** Courses on this list are approved for the academic 2020-2021 year which begins with Fall Semester, 2020. This list is valid through Summer 2021.
- Students wishing to use a course to meet a CSU General Education requirement must be sure that the course is approved for the academic year in which it is taken. Courses on this list are approved by the CSU Chancellor's Office for the 2020-2021 academic year. **NOTE:** *There are no catalog rights for CSU certification.*
- Previous CSU General Education Approved Course Lists are available at [www.assist.org](http://www.assist.org) (<http://www.assist.org>). Information is also available at the Fullerton College Counseling Resource Center and the Cadena/Transfer Center, or you may request verification from a counselor.
- Fullerton College will certify courses taken at other California community colleges in the areas designated by the offering college. Courses taken at California four-year colleges or accredited out-of-state two-year or four-year colleges will be certified if they are equivalent to courses on the CSU GE course list. Courses from foreign institutions cannot be used in the certification process.
- **Certification is not automatic and must be requested** after the completion of the last term prior to transfer. This request should be made in the Admissions and Records Office and will occur when final transcripts are sent to the CSU. Students requesting CSU GE "pass along" certification must complete at least 12 transferable units at FC.

## California State University Transfer Admission Requirements

Students who did not meet the CSU Admission eligibility index in high school may qualify for admission as a transfer student with a grade point

average of 2.00 (C) or better in all college transferable units attempted. They must also be in good standing at the last college or university attended, have 60 or more semester units, and meet the following:

1. 1987 or earlier high school graduates: complete the CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units), with a grade of C or better in each course;
2. 1988 and later high school graduates: complete a minimum of 30 semester (45 quarter) units, with a grade of C or better in each course, to be chosen from courses in English, arts and humanities, social science, science, and mathematics of at least equivalent level to courses that meet general education or transfer curriculum requirements. You must complete all CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3-4 semester units) as part of the 30 unit requirement.

## University of California Transfer Admission Requirements

Admission eligibility requirements for transfer students enrolling at the University of California are similar to the previous year. These requirements apply to students who were not eligible to attend the University as freshmen because they did not meet the freshman Scholarship Requirement. Students in this category must:

1. Complete 60 semester units or 90 quarter units of transferable college coursework with a grade point average of at least 2.40, and
2. Complete a course pattern requirement (with a grade of C or better in each course) to include:
  - a. Two transferable college courses (3 semester or 4-5 quarter units each) in English Composition; and
  - b. One transferable college course (minimum 3 semester or 4-5 quarter units) in Mathematical Concepts and Quantitative Reasoning; and
  - c. Four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: Arts and Humanities; Social and Behavioral Sciences; or Physical and Biological Sciences.

The above transfer requirements do not affect students who were eligible for admission to the University when they graduated from high school. In other words, students who have satisfied the Subject Requirement ("a-f" courses), Scholarship Requirement (GPA), and Examination Requirement (SAT I/ACT and SAT II) – all required for freshman admission – are still eligible to transfer if they have a (2.00) average (C) in their transferable college coursework.

Students who met the Scholarship and Examination Requirements but who did not satisfy the Subject Requirement based on their high school record must take transferable college courses in the subjects they are missing, earn a grade of C or better in each of these required courses, and earn an overall C (2.00) average in all transferable college coursework to be eligible to transfer. This means that students entering the University Fall 1998 and thereafter cannot use non-transferable college courses to make-up "a-f" subject omissions. The only way to satisfy this requirement is to use transferable college courses.

Students who met the Subject and Scholarship Requirements, but who did not meet the Examination Requirement, must complete a minimum of 12

semester (18 quarter) units of transferable work and earn an overall C (2.00) average in all transferable college coursework completed. Thus, under these requirements, students need not take the examinations required of freshmen.

It is advisable that students make counseling appointments to review the UC transfer requirements and obtain an educational course plan. Students may contact the Fullerton College Counseling Resource Center or the Cadena/Transfer Center for further University of California transfer information. Many UCs are not currently accepting lower division transfer students.

## Language Other Than English

(UC requirement only)

- Complete 2 years of the same foreign language of high school level work with a grade of C or better; OR
- Earn a score of 3 or higher in the College Board Advanced Placement exams in language other than English; OR
- Satisfactory score in the SAT II: Subject Test in languages other than English

*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/Korean with Listening	500
Latin	500/530
Spanish/Spanish with Listening	500/520;

OR

- Satisfactory score of 5 or higher in the International Baccalaureate Higher Level Examinations in languages other than English; OR
- Complete 1 course from the courses below:

Code	Title	Units
CHIN 102 F	Elementary Chinese - Mandarin II	5
FREN 102 F	Elementary French II	5
GERM 102 F	Elementary German II	5
ITAL 102 F	Elementary Italian II	5
JAPN 102 F	Elementary Japanese II	5
PORT 102 F	Elementary Portuguese II	5
SPAN 102 F	Elementary Spanish II	5
or SPAN 102HF	Honors Elementary Spanish II	
SPAN 201 F	Spanish for the Spanish Speaker	5

## Intersegmental General Education Transfer Curriculum

### 2021-2022

### Intersegmental General Education Transfer Curriculum (IGETC)

Completion of the IGETC will permit a student to complete their lower division G.E. requirements to either the California State University (CSU) or University of California (UC) system. Courses on this list are approved for the academic year 2021-2022 which begins Fall Semester, 2021. This list is valid through Summer 2022. It should be noted that completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way to fulfill the lower-division general education requirements of the CSU or UC prior to transfer. **A grade of C or better is required in ALL coursework used for IGETC certification.**

### Area 1 - English Communication

**CSU 3 courses = 9 semester units / 12-15 quarter units**

**UC 2 courses = 6 semester units / 8-10 quarter units**

Code	Title	Units
<b>1A English Composition (1 course required)</b>		
ENGL 100 F	College Writing	4
or ENGL 100HF	Honors College Writing	
ENGL 101 F	Enhanced College Writing (one course required)	5
ENGL 110 F	Enhanced College Writing for Non-Native Speakers (beg F'21)	5
<b>1B Critical Thinking - English Composition (1 course required)</b>		
ENGL 103 F	Critical Reasoning and Writing	4
or ENGL 103HF	Honors Critical Reasoning and Writing	
ENGL 104 F	Critical Thinking and Writing About Literature	4
ENGL 201 F	Intermediate College Writing	3
PHIL 172 F	Critical Thinking and Writing (one course required)	3
READ 142 F	College Reading: Logical Analysis and Evaluation (beg F'21)	3
<b>1C Oral Communication<sup>1</sup></b>		
COMM 100 F	Public Speaking	3
COMM 124 F	Small Group Communication	3
COMM 135 F	Essentials of Argumentation	3

<sup>1</sup> 1 course required for CSU; students transferring to UC do not have to meet the Oral Communication requirement.

### Area 2: Mathematical Concepts and Quantitative Reasoning

**1 course = 3 semester units / 4-5 quarter units**

Code	Title	Units
<b>2A - Mathematical Concepts and Quantitative Reasoning</b>		
MATH 100 F	Liberal Arts Mathematics (beg F'04)	3
MATH 120 F	Introductory Probability and Statistics <sup>1</sup>	4
or MATH 120HF	Honors Introductory Probability and Statistics	

MATH 121 F	Enhanced Introductory Probability and Statistics (beg F'21) <sup>1,3</sup>	5	DANC 200 F	Dance Appreciation - A Classical Ballet Retrospective	3
MATH 130 F	Calculus for Business <sup>2</sup>	4	DANC 210 F	Multicultural Dance in the U.S. Today	3
MATH 141 F	College Algebra	4	ENGL 208 F	Introduction to Film Studies	3
or MATH 141HF	Honors College Algebra		MUS 113 F	Jazz History - An Appreciation	3
MATH 143 F	Enhanced College Algebra (beg F'21) <sup>1,3</sup>	5	MUS 116 F	Music Appreciation	3
MATH 151 F	Calculus I (formerly MATH 150AF)	4	MUS 118 F	Introduction to Opera	3
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)		MUS 119 F	History of Rock Music	3
MATH 152 F	Calculus II (formerly MATH 150BF)	4	MUS 120 F	Survey of Music History	3
or MATH 152HF	Honors Calculus II		MUS 196HF	Honors Creative Arts - Music <sup>1</sup>	3
MATH 170 F	Discrete Structures	4	THEA 100 F	Introduction to the Theatre	3
MATH 171 F	Discrete Mathematics	4	THEA 104 F	Introduction to Theatre Appreciation	3
MATH 172 F	Graph Theory and Linear Algebra (beg F'07)	4	THEA 105 F	Musical Theatre History	3
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4	THEA 196HF	Honors Creative Arts - Theatre <sup>1</sup>	3
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4	<b>3B Humanities</b>		
MATH 255 F	Linear Algebra	3	CDES 242 F	Introduction to Liberal Studies	3
MATH 260 F	Ordinary Differential Equations	3	CHIN 203 F	Intermediate Chinese - Mandarin III (beg F'11)	4
PSY 161 F	Elementary Statistics for Behavioral Science (beg F'07) <sup>1</sup>	4	CHIN 204 F	Intermediate Chinese - Mandarin IV (beg F'13)	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science		FREN 203 F	Intermediate French III	4
SOSC 120 F	Introduction to Probability and Statistics <sup>1</sup>	4	FREN 204 F	Intermediate French IV	4

<sup>1</sup> If MATH 120 F or MATH 120HF, SOSC 120 F, PSY 161 F or PSY 161HF combined: maximum UC credit allowed = 1 course.

<sup>2</sup> If MATH 130 F combined with MATH 151 F or MATH 151HF: maximum UC credit allowed = 1 course.

<sup>3</sup> -> Maximum credit, 4 units

## Area 3 - Arts and Humanities

**At least 3 courses = 9 semester units / 12-15 quarter units. One course is required from each area.**

Code	Title	Units
<b>3A Arts</b>		
ART 100 F	Fundamentals of Art (beg F'20)	3
ART 110 F	Introduction to Art	3
ART 112 F	Art History - Ancient to Medieval	3
ART 113 F	Art History - Renaissance to Modern	3
or ART 113HF	Honors Art History - Renaissance to Modern	
ART 114 F	Art History - Impressionism to Present	3
ART 116 F	Art History - The Art of Mexico	3
ART 117 F	Art History - American Art	3
ART 196HF	Honors Creative Arts - Art <sup>1</sup>	3
ART 211 F	Women in the Arts (beg F'20)	3
ART 212 F	Art History - The Art of Asia	3
ART 213 F	Art History: Pre-Columbian Art	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema 1946 to Present	3
CRTV 131 F	Contemporary American Cinema (formerly Contemporary Cinema)	3
DANC 100 F	Dance Appreciation (beg F'21) <sup>3</sup>	3
DANC 120 F	Dance History	3
ENGL 102 F	Introduction to Literature	3
or ENGL 102HF	Honors Introduction to Literature	
ENGL 203 F	Introduction to Dramatic Literature	3
ENGL 204 F	Introduction to Poetry	3
ENGL 207 F	The Short Story	3
ENGL 211 F	British Literature to 1800	3
or ENGL 211HF	Honors British Literature to 1800	
ENGL 212 F	British Literature since 1800	3
or ENGL 212HF	Honors British Literature since 1800	
ENGL 221 F	American Literature to the Civil War	3
or ENGL 221HF	Honors American Literature to the Civil War	
ENGL 222 F	American Literature from the Civil War to the Present	3
or ENGL 222HF	Honors American Literature from the Civil War to the Present	
ENGL 224 F	World Literature through the Early Modern Period	3
or ENGL 224HF	Honors World Literature through the Early Modern Period	

ENGL 225 F	World Literature since the Early Modern Period	3	HIST 270 F	Women in United States History (beg Spr'06) <sup>4</sup>	3
or ENGL 225HF	Honors World Literature since the Early Modern Period		HIST 275 F	History of California	3
ENGL 234 F	Introduction to Shakespeare (beg F'08)	3	PHIL 100 F	Introduction to Philosophy	3
or ENGL 234HF	Honors Introduction to Shakespeare		or PHIL 100HF	Honors Introduction to Philosophy	
ENGL 239 F	Survey of Children's Literature	3	PHIL 101 F	Introduction to Religious Studies	3
ENGL 240 F	Survey of Young Adult Literature	3	PHIL 105 F	World Religions	3
ENGL 243 F	Folklore and Mythology	3	or PHIL 105HF	Honors World Religions	
or ENGL 243HF	Honors Folklore and Mythology		PHIL 135 F	Social and Political Philosophy (beg F'12)	3
ENGL 245 F	The Bible as Literature	3	PHIL 160 F	Introduction to Ethics	3
ENGL 246 F	The Novel	3	PHIL 195 F	Women's Issues in Philosophy	3
ENGL 248 F	Science Fiction	3	PHIL 200 F	Introduction to Christianity (beg F'21) <sup>3</sup>	3
ENGL 249 F	Survey of Chicano/a Literature	3	PHIL 210 F	Introduction to Judaism (beg F'11)	3
ENGL 251 F	Survey of Native American Literature	3	PHIL 220 F	The Holocaust (formerly PHIL 198AF)	3
ETHS 130 F	African-American History I <sup>4</sup>	3	PHIL 225 F	The American Religious Experience (beg F'16)	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) <sup>4</sup>	3	PHIL 250 F	The Religion of Islam (beg F'11)	3
HIST 110 F	Western Civilizations to 1550 (formerly Western Civilization I)	3	PHIL 270 F	Introduction to Asian Religions (beg F'11)	3
or HIST 110HF	Honors Western Civilizations to 1550 (formerly Western Civilization II)				
HIST 111 F	Western Civilizations Since 1550 (formerly Western Civilization II)	3			
or HIST 111HF	Honors Western Civilizations Since 1550 (formerly Honors Western Civilization II)				
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) <sup>4</sup>	3			
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)				
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) <sup>4</sup>	3			
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)				
HIST 127 F	Survey of United States History (formerly Survey of American History) <sup>5</sup>	3			
HIST 151 F	Survey of British History I	3			
HIST 152 F	Survey of British History II	3			
HIST 154 F	Ancient Egypt	3			
HIST 160 F	Asian Civilizations I (formerly HIST 160AF)	3			
HIST 161 F	Asian Civilizations II (formerly HIST 160BF)	3			
HIST 165 F	Introduction to the Middle East	3			
or HIST 165HF	Honors Introduction to the Middle East				
HIST 170 F	History of the United States to 1877 (formerly History of the United States I) <sup>5</sup>	3			
or HIST 170HF	Honors History of the United States to 1877 (formerly Honors History of the United States I)				
HIST 171 F	History of the United States Since 1877 (formerly History of the United States II) <sup>5</sup>	3			
or HIST 171HF	Honors History of the United States Since 1877 (formerly Honors History of the United States II)				
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3			
HIST 191 F	History of the Americas II (formerly HIST 162BF)	3			

<sup>1</sup> Maximum UC credit one course from ART 196HF, MUS 196HF, THEA 196HF.

<sup>2</sup> If SPAN 201 F and SPAN 203 F combined; maximum credit, one course (per college).

<sup>3</sup> Course is new for 2021-2022

<sup>4</sup> Course can only be used in **one** area (Area 1 to 5).

<sup>5</sup> Credit will be granted for either (HIST 127 F) **OR** (HIST 170 F and HIST 171 F) **OR** (HIST 170 F and HIST 171HF) **OR** (HIST 170HF and HIST 171 F) **OR** (HIST 170HF and HIST 171HF).

## Area 4 - Social and Behavioral Sciences

**At least 3 courses = 9 semester units / 12-15 quarter units. Select from at least two (2) disciplines.**

Code	Title	Units
<b>4 - Social and Behavioral Sciences</b>		
ANTH 102 F	Cultural Anthropology	3
or ANTH 102HF	Honors Cultural Anthropology	
ANTH 103 F	Introduction to Archaeology	3
or ANTH 103HF	Honors Introduction to Archaeology	
ANTH 105 F	Language and Culture	3
ANTH 107 F	Anthropology of Magic, Witchcraft and Religion	3
or ANTH 107HF	Honors Anthropology of Magic, Witchcraft and Religion	
ANTH 209 F	Cultures of Latin America	3
ANTH 211 F	Celtic Cultures	3
ANTH 215 F	Global Issues in Anthropological Perspective <sup>2</sup>	3
ECON 101 F	Principles of Economics - Micro	3
or ECON 101HF	Honors Principles of Economics - Micro	
ECON 102 F	Principles of Economics - Macro	3
or ECON 102HF	Honors Principles of Economics-Macro	
ETHS 101 F	American Ethnic Studies	3
or ETHS 101HF	Honors American Ethnic Studies	
ETHS 111 F	Women of Color in the U.S.	3

ETHS 129 F	Introduction to African-American Studies	3	PSY 221 F	The Brain and Behavior	3
ETHS 130 F	African-American History I (beg Spr'06) <sup>1</sup>	3	PSY 222 F	Abnormal Psychology	3
ETHS 131 F	African-American History II	3	PSY 251 F	Social Psychology	3
ETHS 150 F	Introduction to Chicana-o Studies (formerly ETHS 140 F)	3	or PSY 251HF	Honors Social Psychology	
ETHS 151 F	Chicana/o History I (formerly ETHS 141 F)	3	SOC 101 F	Introduction to Sociology	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3	or SOC 101HF	Honors Introduction to Sociology	
ETHS 153 F	Chicana-o and Latina-o Contemporary Issues (formerly ETHS 142 F)	3	SOC 102 F	Social Problems	3
or ETHS 153HF	Honors Chicana-o and Latina-o Contemporary Issues		SOC 201 F	Dying and Death (beg F'09)	3
ETHS 159 F	Introduction to American Indian Studies (beg F'21)	3	SOC 230 F	Sociology of Gender	3
ETHS 160 F	American Indian History (formerly History of the Native Americans) (beg F'21) <sup>1</sup>	3	or SOC 230HF	Honors Sociology of Gender	
ETHS 170 F	Introduction to Asian Pacific Islander American Studies	3	SOC 250 F	Sociology of Aging	3
ETHS 171 F	Asian Pacific Islander American History	3	SOC 275 F	Marriage and Family	3
ETHS 202 F	Race, Ethnicity and Pop Culture <sup>2</sup>	3	or SOC 275HF	Honors Marriage and Family	
ETHS 235 F	Contemporary Social Justice Movements	3	SOC 277 F	Sociology of Religion	3
or ETHS 235HF	Honors Contemporary Social Justice		or SOC 277HF	Honors Sociology of Religion	
GEOG 100 F	Global Geography	3	SOC 280 F	Media, Culture and Society (beg F'21)	3
or GEOG 100HF	Honors Global Geography		SOC 285 F	Drugs and Society	3
GEOG 120 F	Global Environmental Problems	3	or		
GEOG 130 F	California Geography	3	SOC 285HF	Honors Drugs and Society (beg F'21)	3
GEOG 160 F	Cultural Geography	3	SOC 290 F	Sociology of Race and Ethnicity	3
GEOG 262 F	Economic Geography	3	or		
HIST 112 F	World Civilizations to 1550 (formerly World Civilizations I) (beg Spr'06) <sup>1</sup>	3	SOC 290HF	Honors Sociology of Race and Ethnicity (beg F'21)	3
or HIST 112HF	Honors World Civilizations to 1550 (formerly Honors World Civilizations I)		SOC 292 F	Introduction to Criminology	3
HIST 113 F	World Civilizations Since 1550 (formerly World Civilizations II) (beg Spr'06) <sup>1</sup>	3	or		
or HIST 113HF	Honors World Civilizations Since 1550 (formerly Honors World Civilizations II)		SOC 292HF	Honors Introduction to Criminology	3
HIST 270 F	Women in United States History <sup>1</sup>	3	SOSC 125 F	Introduction to Research Methods	3
HIST 273 F	United States Environmental History <sup>2</sup>	3	SOSC 130 F	Introduction to LGBTQ Studies	3
POSC 100 F	American Government	3	WMNS 100 F	Introduction to Women's Studies (beg F 13)	3
or POSC 100HF	Honors American Government		or WMNS 100HF	Honors Introduction to Women's Studies	
POSC 110 F	Contemporary American Politics	3			
or POSC 110HF	Honors Contemporary American Politics				
POSC 120 F	Introduction to Political Theory	3			
POSC 200 F	Introduction to the Study of Politics	3			
POSC 215 F	Comparative Politics	3			
POSC 216 F	Government and Politics of the Middle East	3			
POSC 230 F	Introduction to International Relations	3			
POSC 250 F	Gender and Politics <sup>2</sup>	3			
PSY 101 F	General Psychology	3			
or PSY 101HF	Honors General Psychology				
PSY 131 F	Cross Cultural Psychology	3			
PSY 139 F	Developmental Psychology - Life Cycle	3			
PSY 145 F	Child Psychology	3			
PSY 202 F	Research Methods in Psychology	4			
or PSY 202HF	Honors Research Methods in Psychology				

<sup>1</sup> Course can only be used in **one** area (AREA 1 to 5).

<sup>2</sup> Courses new for 2021-2022

## Area 5 - Physical and Biological Sciences

**At least 2 courses = 7-9 semester units / 9-12 quarter units. One lecture course is required from each area 5A and 5B.**

**One matching lab from area 5C must be included for Physical Science or Life Science if lecture and lab are taken separately.**

Code	Title	Units
<b>5A Physical Science</b>		
CHEM 100 F	Chemistry for Daily Life <sup>1, 2</sup>	4
CHEM 101 F	Chemistry for Allied Health Science <sup>1, 3</sup>	5
CHEM 103 F	Chemistry in a Changing World <sup>2</sup>	3
CHEM 107 F	Preparation for General Chemistry <sup>1, 3</sup>	5
CHEM 111AF	General Chemistry I <sup>1</sup>	5
CHEM 111BF	General Chemistry II <sup>1</sup>	5
ESC 100 F	Physical Geology	3
ESC 101 F	Earth Science Survey <sup>4</sup>	3
ESC 103 F	Historical Geology <sup>1</sup>	4
ESC 105 F	Introduction to Weather and Climate	3
ESC 107 F	Earth Science for Educators	4
ESC 107 F	Earth Science for Educators (beg F'19) <sup>1</sup>	4



ESC 110 F	Introduction to Climate Science	3
ESC 116 F	Astronomy	3
or ESC 116HF	Honors Astronomy	
ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 190 F	Environmental Geology	3
GEOG 102 F	Physical Geography	3
or GEOG 102HF	Honors Physical Geography	
PHYS 120 F	Relativity for Poets	3
PHYS 130 F	Elementary Physics <sup>1,5</sup>	4
PHYS 205 F	Physics for the Life Sciences I <sup>1,6</sup>	4
PHYS 206 F	Physics for the Life Sciences II <sup>1,6</sup>	4
PHYS 210 F	Physics with Calculus for the Life Sciences I <sup>1,6</sup>	4
PHYS 211 F	Physics with Calculus for the Life Sciences II <sup>1,6</sup>	4
PHYS 221 F	General Physics I (beg F 13) <sup>1,6</sup>	4
PHYS 222 F	General Physics II <sup>1,6</sup>	4
PHYS 223 F	General Physics III <sup>1,6</sup>	4

**5B Biological Science**

ANAT 231 F	General Human Anatomy <sup>1</sup>	4
ANAT 240 F	Human Physiology <sup>1</sup>	5
ANTH 101 F	Physical Anthropology	3
or ANTH 101HF	Honors Physical Anthropology	
BIOL 100 F	Principles of Biology <sup>7,8</sup>	4
BIOL 101 F	General Biology <sup>1,7,8</sup>	5
or BIOL 101HF	Honors General Biology	
BIOL 102 F	Human Biology <sup>8</sup>	3
BIOL 108 F	Plants and People	3
BIOL 109 F	Genetics and Biotechnology in Society <sup>8</sup>	3
BIOL 170 F	Organismal Biology <sup>1</sup>	5
BIOL 190 F	Introduction to Biotechnology	3
BIOL 222 F	Marine Biology <sup>1</sup>	3
BIOL 272 F	Cell and Molecular Biology <sup>1</sup>	4
BIOL 274 F	General Ecology <sup>1</sup>	4
ENVS 105 F	Environmental Biology	3
MICR 262 F	General Microbiology <sup>1</sup>	5

**5C Science Laboratory**

ANTH 101LF	Physical Anthropology Lab <sup>1</sup>	1
BIOL 102LF	Human Biology Laboratory <sup>1</sup>	1
BIOL 190LF	Introduction to Biotechnology Lab <sup>1</sup>	1
ENVS 105LF	Environmental Biology Lab <sup>1</sup>	1
ESC 100LF	Physical Geology Lab <sup>1</sup>	1
ESC 101LF	Earth Science Survey Lab <sup>1,4</sup>	1
ESC 105LF	Introduction to Weather and Climate Laboratory (beg F'17) <sup>1</sup>	1
ESC 116LF	Astronomy Lab <sup>1</sup>	2
ESC 130LF	Introduction to Oceanography: Field Experience <sup>1</sup>	1
GEOG 102LF	Physical Geography Laboratory <sup>1</sup>	1

- <sup>1</sup> Course meets the laboratory requirement.
- <sup>2</sup> If CHEM 100 F and CHEM 103 F combined: maximum UC credit allowed = 1 course. (No UC credit for CHEM 100 F or CHEM 103 F if taken after CHEM 111AF)
- <sup>3</sup> If CHEM 101 F and CHEM 107 F combined: maximum UC credit allowed = 1 course. (No UC credit for CHEM 101 F or CHEM 107 F if taken after CHEM 111AF)
- <sup>4</sup> No UC Credit if taken after a college level course in Astronomy, Chemistry, Geology, or Physics.
- <sup>5</sup> PHYS 130 F: no UC credit if taken after PHYS 205 F, PHYS 210 F, or PHYS 221 F
- <sup>6</sup> If (PHYS 205 F & PHYS 206 F) or (PHYS 210 F & PHYS 211 F) or (PHYS 221 F, PHYS 222 F, PHYS 223 F) combined: maximum credit, one series.
- <sup>7</sup> BIOL 100 F, BIOL 101 F, and BIOL 101HF combined: maximum credit = 1 course.
- <sup>8</sup> BIOL 100 F, BIOL 101 F, BIOL 101HF, BIOL 102 F, or BIOL 109 F: no UC credit if taken after BIOL 170 F or a 200-level Biological course.

**6A - Language Other Than English (UC requirement only)**

The Foreign Language requirement for IGETC may be met in one of the following ways:

1. Satisfactory completion of two years of high school coursework in a Language Other Than English, with a grade of C- or better in the final semester of the second year. Two years must be in the same language.
2. Complete course 102 F (102HF) or higher level in a foreign language with a grade of C or better at Fullerton College or equivalent courses at another college or university. Choose one of the courses listed:

Code	Title	Units
CHIN 102 F	Elementary Chinese - Mandarin II	5
CHIN 203 F	Intermediate Chinese - Mandarin III	4
CHIN 204 F	Intermediate Chinese - Mandarin IV	4
FREN 102 F	Elementary French II	5
FREN 203 F	Intermediate French III	4
FREN 204 F	Intermediate French IV	4
GERM 102 F	Elementary German II	5
GERM 203 F	Intermediate German III	4
GERM 204 F	Intermediate German IV	4
ITAL 102 F	Elementary Italian II	5
ITAL 203 F	Intermediate Italian III	4
ITAL 204 F	Intermediate Italian IV	4
JAPN 102 F	Elementary Japanese II	5
JAPN 203 F	Intermediate Japanese III	4
JAPN 204 F	Intermediate Japanese IV	4
PORT 102 F	Elementary Portuguese II	5
SPAN 102 F	Elementary Spanish II	5
or SPAN 102HF	Honors Elementary Spanish II	
SPAN 201 F	Spanish for the Spanish Speaker	5
SPAN 203 F	Intermediate Spanish III	4
SPAN 204 F	Intermediate Spanish IV	4

SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3

Students who took an out-of-state Political Science course, please see a counselor.

- Satisfactory completion, with a grade of C or better, of two years formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English.
- Satisfactory score of the SAT II: Subject Test in Languages Other Than English
- Satisfactory score, 3 or higher, on the College Board Advanced Placement Examinations in Language Other Than English.
- Satisfactory score, 5 or higher, on the International Baccalaureate Higher Level Examinations in Language Other Than English.
- Satisfactory completion of an achievement test administered by a community college, university, or other college in a Language Other Than English.
- (International) General Certificate of Secondary Education ((I)GCSE)/ General Certificate of Education (GCE) "O" Level exams in LOTE with a grade of A, B, or C.
- General Certificate of Education (GCE) "A" Level exams in LOTE with a grade of A, B, or C.
- A Defense Language Institute Foreign Language Center (DLIFLC) LOTE course which is indicated as passed with a C or higher on the official transcript.

#### IMPORTANT NOTE:

Students enrolled in high unit majors (i.e., architecture, computer science, engineering, sciences) are frequently recommended not to use IGETC to meet general education certification but rather to meet transfer admission requirements and complete required lower division major and support courses. See your counselor to develop an academic educational plan.

It is recommended that **all IGETC requirements be completed prior to transfer**. If you are unable to complete one or two IGETC courses in the final term before transfer, you may be eligible to complete IGETC after transfer, providing that those courses are not among those required for admission. See your counselor for more information.

Certification is not automatic, and must be requested after the completion of the last term prior to transfer. This request should be made in the Admissions and Records Office.

(2021 Dr. Lee/KTran)

## Educational Objective - Transfer

Many students attend a California Community College with the intention of transferring to a four-year college or university. A considerable number of courses offered at Fullerton College are transferable to four-year colleges and universities. In addition, Fullerton College has established a plan of coursework in certain majors that transfer as core preparation at various universities. These courses are referred to as major prep courses which articulate to the four-year universities. It is advisable for students planning to transfer to seek assistance from the Counseling Center and/or the Transfer Center since transfer institution requirements vary significantly. Transfer Students are encouraged to meet with a counselor each semester to review any possible changes in transfer admission, general education, major and/or major support course requirements.

Fullerton College transfers many students to the California State University (CSU) and University of California (UC) systems as well as private and out-of-state universities. To access Fullerton College articulation agreements, please reference [www.assist.org](http://www.assist.org) (<http://www.assist.org>).

The following is a list of the most frequently requested transfer majors by Fullerton College students. More information is available regarding each of these transfer majors in the Counseling Center. Additional transfer majors are available and may be found at [www.assist.org](http://www.assist.org) (<http://www.assist.org>).

Please see a counselor for additional assistance.

*Transfer Guide to Major* materials are available in the Counseling Center for the following programs leading to Transfer:

Administration of Justice (p. 209) (Criminal Justice)  
 Anthropology (p. 213)  
 Architecture (p. 216)  
 Art (p. 218) (Ceramics)  
 Art (p. 218) (Crafts or 3-D Media)  
 Art (p. 218) (Drawing and Painting)  
 Art (p. 218) (General)  
 Art (p. 218) (Graphic Design)  
 Art (p. 218) (History)

## CSU Graduation Requirement in U.S. History, Constitution and American Ideals

6 semester units / 8-10 quarter units; one course from Group 1 and one course from Group 2

Code	Title	Units
<b>Group 1</b>		
ETHS 101 F or ETHS 101HF	American Ethnic Studies Honors American Ethnic Studies	3
ETHS 130 F	African-American History I	3
ETHS 131 F	African-American History II	3
ETHS 152 F	Chicana-o History II (formerly ETHS 141 F)	3
ETHS 160 F	American Indian History (formerly History of the Native Americans)	3
HIST 127 F	Survey of United States History (formerly Survey of American History)	3
HIST 170 F or HIST 170HF	History of the United States to 1877 (formerly History of the United States I) Honors History of the United States to 1877 (formerly Honors History of the United States I)	3
HIST 171 F or HIST 171HF	History of the United States Since 1877 (formerly History of the United States II) Honors History of the United States Since 1877 (formerly Honors History of the United States II)	3
HIST 190 F	History of the Americas I (formerly HIST 162AF)	3
HIST 191 F	History of the Americas II (formerly HIST 162BF) (beg F'15)	3
HIST 270 F	Women in United States History	3
<b>Group 2</b>		
POSC 100 F or POSC 100HF	American Government Honors American Government	3

Art (p. 218) (Illustration)  
 Art (p. 218) (Photography)  
 Art (p. 218) (Printmaking)  
 Art (p. 218) (Sculpture)  
 Art (p. 218) (Studio Art)  
 Art (p. 218) (Teaching)  
 Biochemistry  
 Biological Sciences (p. 247)  
 Business Administration (p. 253)  
 Chemistry (p. 267)  
 Child Development (p. 269)  
 Communications (p. 277) (Advertising)  
 Communications (p. 277) (Film, Radio-TV, Telecommunication)  
 Communications (p. 277) (General)  
 Communications (p. 379) (Journalism/Broadcast)  
 Communications (p. 277) (Public Relations)  
 Computer Science (p. 300)  
 Dance (p. 313)  
 Economics (p. 320)  
 Engineering (p. 322)  
 Engineering Technology (p. 322)  
 English (p. 323)  
 Ethnic Studies (p. 331)  
 Fashion (p. 337) (Merchandising/Textiles)  
 French (p. 345)  
 Geography (p. 349)  
 Geological Science (p. 352)  
 German (p. 345)  
 Health Science (p. 427)  
 History (p. 356)  
 Hotel and Restaurant Management  
 Interior Design (p. 376)  
 International Relations (p. 440)  
 Kinesiology (p. 427)  
 Mathematics (p. 395)  
 Music (p. 402)  
 Music Technology (p. 402)  
 Nutrition/Food (p. 415) (Dietetics)  
 Philosophy (p. 421)  
 Physics (p. 439)  
 Plant Science/Horticulture (p. 360)  
 Political Science (p. 440)  
 Pre-Chiropractic  
 Pre-Dental Hygiene  
 Pre-Dentistry  
 Pre-Medicine  
 Pre-Nursing (p. 440)  
 Pre-Optometry  
 Pre-Pharmacy  
 Pre-Physical Therapy  
 Pre-Physician Assistant  
 Pre-Veterinarian Science  
 Psychology (p. 449)  
 Recreation (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/recreation/>)  
 Religious Studies (p. 421)  
 Social Work/Human Services/Social Ecology (p. 458)  
 Sociology (p. 458)  
 Spanish (p. 461)  
 Theatre Arts (p. 465) (General)  
 Theatre Arts (p. 465) (Musical)  
 Theatre Arts (p. 465) (Performance/Playwriting)

Theatre Arts (p. 465) (Teaching)  
 Theatre Arts (p. 465) (Technical Production & Design)  
 Women's Studies

## General Information

### About Fullerton College

Founded in 1913, Fullerton College has a rich tradition of student success. As one of five institutions of higher education in the city of Fullerton, the college is an integral part of a complex higher education system. Fullerton College offers a comprehensive academic program of lower division transfer courses and vocational training to prepare students for transfer as well as the technology-driven workplace.

The 83-acre campus features 10 major institutional buildings including conventional classrooms and laboratory facilities for science, art, computer technology, photography, automotive services, physical education, and other specialized programs. A full complement of athletic fields and facilities surrounds the campus.

The college enrolls approximately 21,000 students each semester and employs 315 full-time faculty members, approximately 500 adjunct faculty members, 325 classified employees and 21 managers.

### College Location

Fullerton College is located in the city of Fullerton, in Orange County, California.

For commuters, the beautifully landscaped campus is easily accessible from the 57 and 91 Freeways. The college is within close walking distance from the Metrorail station in downtown Fullerton, and buses regularly drop off and pick up students in front of the college on Chapman Avenue.

Fullerton College is in close proximity to several cultural and entertainment venues in Orange County and Los Angeles. It is also conveniently located near other institutions of higher learning in the surrounding cities.

### North Orange Continuing Education (NOCE)

North Orange Continuing Education (NOCE) is part of the North Orange County Community College District and offers business development and workforce training, a high school/GED completion program and personal enrichment (non-credit) courses for children, teens, and seniors.

NOCE's Wilshire Center is located at 315 E. Wilshire Street in Fullerton across from Fullerton College. For more information, call (714) 992-9500, or visit [www.noce.edu](http://www.noce.edu) (<http://www.sce.edu>).

### Statement of Ethics

As representatives of Fullerton College, we all share the responsibility to conduct ourselves with integrity, and to act in a fair, consistent, and equitable manner. We recognize the need for openness and reliability in what we say and do. We are committed to addressing issues in a forthright and professional manner, and to engaging people without prejudice. As members of an educational community, we are committed to excellence in all that we do, and to adhering to the principles of ethical behavior established in this statement.

The conduct of each member of Fullerton College is expected to be consistent with and to comply with the principles contained in this

statement. All members of the campus community are expected to engage in the following:

- Trustworthy conduct — including dependability, loyalty, and honesty in communications and actions.
- Respectful behavior — treating everyone with civility, courtesy, tolerance, and acceptance, and recognizing the worth, dignity, and unique characteristics of each individual.
- Accountability — taking personal responsibility for one's own actions and decisions.
- Fair and just actions — utilizing equitable processes in decision making.
- Compassion — caring for others, both within and apart from the campus community, and providing services to others in a manner that reflects our commitment to them and to their well-being.

We accept our responsibility for the betterment of the world around us.

## Statement of Mission, Vision, and Core Values

### Mission

Fullerton College advances student learning and achievement by developing flexible pathways for students from our diverse communities who seek educational and career growth, certificates, associate degrees, and transfer. We foster a supportive and inclusive environment for students to be successful learners, responsible leaders, and engaged community members.

### Vision

Fullerton College will transform lives and inspire positive change in the world.

### Core Values

#### Community

We promote a sense of community that enhances the well-being of our campus and surrounding areas.

#### Diversity

We embrace and value the diversity of our entire community.

#### Equity

We commit to equity for all we serve.

#### Excellence

We honor and build upon our tradition of excellence.

#### Growth

We expect everyone to continue growing and learning.

#### Inclusivity

We support the involvement of all in the decision-making process.

#### Innovation

We support innovation in teaching and learning.

#### Integrity

We act in accordance with personal integrity and high ethical standards.

#### Partnership

We work together with our educational and community partners.

#### Respect

We support an environment of mutual respect and trust that embraces the individuality of all.

#### Responsibility

# Instructional Divisions and Departments

## Business and Computer Information Systems

**Bldg 300, Room 310 – (714) 992-7032**

**Website:** <https://buscis.fullcoll.edu/> (<http://bizdiv.fullcoll.edu>)

### Programs

- Accounting (ACCT)
- Business Management (BUS)
- Computer Information Systems (CIS)
- Computer Information Systems – Gaming (CISG)
- Marketing Management (MKT)
- Paralegal Studies (PLEG)
- Real Estate (RE)

### Division Dean

**Carlos Ayon**

- Administrative Assistant III: Adriana Gonçalves (714) 732-5324
- Administrative Assistant II: Kelley Jones-Horwood (714) 732-5568
- Administrative Assistant I: Carolina Santillán (714) 992-7032

## Counseling and Student Development

**Bldg 2000, Room 2022 – (714) 992-7085**

**Website:** <https://counseling.fullcoll.edu> (<http://counseling.fullcoll.edu>)

### Programs

- Counseling and Guidance (COUN)

### Centers

- Assessment/Orientation Center, Bldg 3000, Rm 3023, (714) 992-7117
- Cadena Cultural and Transfer Center, Bldg 200, Rm 212, (714) 992-7086
- Career and Life Planning Center, Bldg 2000, 2nd Floor (714) 992-7121

### Division Dean

**Dr. Jennifer LaBounty**

- Admin Assistant III: Christi O'Daniel, (714) 732-5525
- Admin Assistant II: Jennifer Shields, (714) 732-5535
- Admin Assistant II: Maria Abutin, (714) 732-5541
- Admin Assistant I: Dixie Stretch, (714) 732-5534

## Fine Arts

**Bldg 1100, Room 1115 – (714) 992-7034**

**Website:** <https://finearts.fullcoll.edu> (<http://finearts.fullcoll.edu>)

### Programs

- Art (ART)
- Digital Arts (DART)
- Music (MUS)

- Music – Applied (MUSA)
- Theatre Arts (THEA)

### Division Dean

**John Tebay**

- Admin Assistant III: Olivia Perez (714) 732-5700
- Art Department Admin Assistant II: (Vacant) (714) 732-5714
- Music Department Admin Assistant II: Antonese Cotton (714) 732-5709
- Theatre Department Admin Assistant II: Selene Parral (714) 732-5707

## Humanities

**Bldg 500, Room 522-0 – (714) 992-7036**

**Website:** <https://humanities.fullcoll.edu> (<http://humanities.fullcoll.edu>)

### Programs

- Communication Studies (COMM)
- English (ENGL)
- English as a Second Language (ESL)
- Foreign Languages
  - Chinese (CHIN)
  - French (FREN)
  - German (GERM)
  - Italian (ITAL)
  - Japanese (JAPN)
  - Portuguese (PORT)
  - Spanish (SPAN)
- Mindfulness (MIND)
- Reading (READ)

### Division Dean

**Dan Willoughby**

- Admin Assistant III: Amy Shrack
- Admin Assistant II: Carol Rehfield
- Admin Assistant II: Tammy Plachy
- Admin Assistant I: Vacant
- Humanities Main Line: (714) 992-7036

## Library and Learning Resources, Instructional Support Programs and Services

**Bldg 800, Room 823 (LLRC) – (714) 992-7039**

**Website:** <https://library.fullcoll.edu> (<http://library.fullcoll.edu>)

### Programs

- Library Technology (LIB)

### Division Dean

**Dr. Dani Wilson**

- Admin Assistant III: Wendy Bailey (714) 732-5680
- Admin Assistant II/Study Abroad: Kristen Weiderholt (714) 732-5688
- Academic Support Center, Bldg 800 (LLRC) - (714) 992-7065

- Director: Kristine Nikkhoo
- Admin Assistant II/Hornets Tutoring: Aaron Mezzano (714) 732-5679
- Admin Assistant II/Tutoring Center: Chynna Barnett (714) 732-5394
- Admin Assistant II/Writing Center: Caroline Sagal (714) 732-5396
- Office Coordinator: Janae Kiely (714) 732-5397
- Staff Development, Bldg 800, Room 800 - (714) 992-7062
  - Admin Assistant I: Heather Treminio (714) 732-5005
- Study Abroad, Bldg 800, Room 823 - (714) 732-5688

## Mathematics and Computer Science

**Bldg 600, Room 613-02 – (714) 992-7041**

**Website:** <https://math.fullcoll.edu>

### Programs

- Computer Science (CSCI)
- Mathematics (MATH)

### Division Dean

Mark Greenhalgh

- Admin Assistant III: Monica Hagmaier (714) 732-5400
- Admin Assistant II: Angela Buechner (714) 732-5401
- Math Lab (714) 992-7140

## Natural Sciences

**Bldg 400, Room 411 – (714) 992-7043**

**Website:** <https://natsci.fullcoll.edu> (<http://natsci.fullcoll.edu>)

### Programs

- Biology (BIOL)
- Chemistry (CHEM)
- Earth Sciences (ESC)
- Environmental Sciences (ENVS)
- Foods and Nutrition (FOOD/NUTR)
- Geology (ESC)
- Health Education (HED)
- Health Sciences
  - Anatomy and Physiology (ANAT)
  - Microbiology (MICR)
- Horticulture (HORT)
- Physics (PHYS)

### Division Dean, Interim

Dr. Bridget Salzameda

- Admin Assistant III: Debbie Horrocks (714) 732-5304
- Admin Assistant II: Antoinette Triefenbach (714) 732-5300
- Natural Sciences Division Main Line: (714) 992-7043

## Physical Education

**Bldg 1200, Room 1206 – (714) 992-7045**

**Websites:** <https://pe.fullcoll.edu> (<http://pe.fullcoll.edu>) - <https://fchornets.com> (<https://fchornets.com/>)

<https://dance.fullcoll.edu> (<http://dance.fullcoll.edu>)

### Programs

- Dance (DANC)
- Physical Education Activities and Theory, Athletics (PE)
- Wellness (WELL)

### Division Dean

Dr. David Grossman

- Admin Assistant III: Anita Ward (714) 732-5626
- Admin Assistant: Michelle Thomason (714) 732-5632
- Admin Assistant: Briana Whitaker (714) 732-5625
- Sports Information: Phil Thurman (714) 732-5630

## Social Sciences

**Bldg 1400, Room 1415 – (714) 992-7047**

**Website:** <https://socsci.fullcoll.edu>

### Programs

- Anthropology (ANTH)
- Child Development and Educational Studies (CDES)
- Economics (ECON)
- Ethnic Studies (ETHS)
- Geography and the Environment (GEOG)
- History (HIST)
- Philosophy and Religious Studies (PHIL)
- Political Science (POSC)
- Psychology (PSY)
- Social Justice Studies (SJS)
- Sociology (SOC)
- Social Science (SOSC)
- Social Work and Human Services (SWHS)
- Women's Studies (WMNS)

### Division Dean

Dr. Jorge Gamboa

- Admin Assistant III: Pat Sanchez (714) 732-5552
- Admin Assistant II: Karen McDowell (714) 732-5553

## Technology and Engineering

**Bldg 700, Room 700 – (714) 992.7051**

**Website:** <https://techneng.fullcoll.edu> (<http://techneng.fullcoll.edu>)

### Programs

- Administration of Justice (AJ)
- Architecture (ARCH)
- Automotive Technology (AUTO)
- Cinema-Radio-Television (CRTV)
- Construction Technology (CSTR)
- Cosmetology (COSM)

- Drafting Technology (DRAF)
- Engineering (ENGR)
- Fashion (FASH)
- Interior Design Technology (IDES)
- Journalism (JOUR)
- Machine Technology (MACH)
- Media Studies
- Metallurgy (METL)
- Photography (PHOT)
- Printing Technology (PRNT)
- Technology (TECH)
- Welding (WELD)

## **Division Dean**

Ken Starkman

- Admin Assistant III: Cynthia Sands (714) 732-5452
- Admin Assistant II: Shauna Fisher (714) 732-5457
- Admin Assistant I: Anita Sandez (714) 732-5454

## Division Structure

<b>DEAN, BUSINESS AND CIS</b>	<b>CARLOS AYON</b>
Accounting Coordinator	Brandon Tran
Business, Marketing, Real Estate Coordinator	Kathy Standen
Computer Information Systems Coordinator	Gabriella Fernandez
Paralegal Studies Director	Michael Moore
<b>DEAN, COUNSELING AND STUDENT DEVELOPMENT</b>	<b>JENNIFER LABOUNTY</b>
Counseling Coordinators	Elsa Perez/Citlally Santana
<b>DEAN, FINE ARTS</b>	<b>JOHN TEBAY</b>
Art Coordinator	Carl Stanaway
Music Coordinator	Michael Scott
Theatre Coordinator	Kevin Clowes
<b>DEAN, HUMANITIES</b>	<b>DAN WILLOUGHBY</b>
Communication Studies Coordinator	Matthew Taylor
English Coordinator	Michael Mangan
English as a Second Language Coordinator	Jefferson Tiangco
Foreign Language Coordinator	Klaus Hornell
Reading Coordinator	Valerie Tuttle
<b>DEAN, LIBRARY/LEARNING RESOURCES, INSTRUCTIONAL SUPPORT PROGRAMS AND SERVICES</b>	<b>DANI WILSON</b>
Honors Program Coordinator	Jodi Balma
Hornets Tutoring Coordinator	Brandon Floerke
Professional Learning Coordinator	Jeanne Costello
Study Abroad Coordinator	Angela Henderson
Writing Center Coordinator	Arthur Hui
<b>DEAN, MATHEMATICS AND COMPUTER SCIENCE</b>	<b>MARK GREENHALGH</b>
Computer Science Coordinator	Andrew Clifton
Mathematics Coordinator	Nicole Rossi
<b>INTERIM DEAN, NATURAL SCIENCES</b>	<b>BRIDGET SALZAMEDA</b>
Anatomy Coordinator	Jacob Sapiro
Biology Coordinator	Spiridon Dimitratos
Chemistry Coordinator	Stephanie Nobles
Earth Sciences Coordinator	Marc Willis
Environmental Sciences Coordinator	Royden Hobbs
Foods and Nutrition Coordinator	Rita Higgins
Health Education Coordinator	David Dorado
Horticulture Coordinator	Jeffery Feaster
Microbiology Coordinator	Jacob Sapiro
Physics Coordinator	Seung Ji
Physiology Coordinator	Jacob Sapiro
<b>DEAN, PHYSICAL EDUCATION</b>	<b>DAVID GROSSMAN</b>
Dance Coordinator	Melanie Rosa
Physical Education Coordinator	Tim Byrnes

<b>DEAN, SOCIAL SCIENCES</b>	<b>JORGE GAMBOA</b>
Anthropology Coordinators	Maria (Leonor) Cadena and Karen Markley
Child Development Educational Studies Coordinator	Karin Pavelek
Economics Coordinator	Francis Mummery
Ethnic Studies Coordinator	Arnetta Smith
Geography and the Environment Coordinator	Aline Gregorio
History Coordinator	Matthew Tribbe
Philosophy and Religious Studies Coordinator	James Crippen
Political Science Coordinator	Naji Dahi and Jodi Balma
Psychology Coordinator	Jean Wolfe
Sociology Coordinator	Kelly Nelson-Wright
<b>DEAN, TECHNOLOGY AND ENGINEERING</b>	<b>KEN STARKMAN</b>
Architecture Coordinator	Alan Ray
Administration of Justice Coordinator	Kelly Robertson
Automotive Coordinator	Jose Miranda
Cinema, Radio and TV Coordinators	Laura Bouza
Construction Coordinator	Jonathan Keller
Cosmetology Coordinator	Charlotte Jimmons
Drafting Coordinator	Dan Carter
Engineering Coordinator	Mareike Classen
Fashion Coordinator	Renee Young
Interior Design Coordinator	Adriana Currie
Journalism Coordinator	Jay Seidel
Machine Technology Coordinator	Dan O'Brien
Photography Coordinator	Melody LaMontia
Printing Coordinator	Ben Cuatt
Radio Coordinator	(Vacant)
Technology Coordinator	George Bonnard
Welding Coordinator	Will Daniels



## Quick Guide for Students

For questions or department not listed below, call 714-992-7000 and press "0" for Operator) or visit <http://www.fullcoll.edu>.

Service/Office	Location	Telephone
Academic Support Center	Bldg 800, LLRC	714-992-7065
Admissions and Records	Bldg 2000, 1st Floor, Student Services	714-905-5162
Assessment Center	Bldg 3000, Rm 3023	714-992-7117
Associated Students/Student Government	Bldg 200, Rm 222, College Center	714-992-7118
ATHLETES	Bldg 1200, Rm 1206	714-992-7045
Basic Skills Office	Bldg 800, Rm 801-H, LLRC	714-992-7066
Bookstore	Bldg 2000, 1st Floor, Student Services	714-992-7008
Bursar's Office	Bldg 2000, 1st Floor, Student Services	714-992-7006
BUSINESS, CIS, AND ECONOMIC WORKFORCE	Bldg 300, Rm 310	714-992-7032
Cadena Cultural Center	Bldg 200, Rm 212, College Center	714-992-7086
CalWORKs	315 N. Pomona, Fullerton (Ben Franklin House)	714-992-7101
Campus Communications	Bldg 100, Rm 113	714-992-7013
Campus ID	Bldg 200, Rm 214-C, College Center	714-992-7000 x24002
Campus Safety/Lost and Found	Bldg 1500	714-992-7080
CARE	Bldg 2000, 1st Floor, Rm 2002, Student Services	714-992-7073
Career and Life Planning Center	Bldg 2000, 2nd Floor, Student Services	714-992-7121
Career and Technical Education (CTE)	Bldg 700, Rm 700	714-992-7585
Child Development Lab School	Bldgs 1820/1830	714-992-7069
Class Schedule and Catalog	District EST, 10th Floor (Laurie Triefenbach)	714-808-4940
Clubs and Organizations	Bldg 200, Rm 214, College Center	714-992-7095
Commencement	Bldg 200, Rm 214, College Center	714-992-7095
Computer Lab	Bldg 500, Rm 511	714-992-7000 x24297
Computer Lab	Bldg 2200	714-992-7000 x24302
COSMETOLOGY	Bldg 700, Rm 712-01	714-732-5463 - Appts (714-992-7123)
COUNSELING	Bldg 2000, 2nd Floor - Student Services	714-992-7084
Disability Support Services	Bldg 840, Rm 842	714-992-7099
Distance Education	Bldg 100, Rm 124 (Darnell Kemp)	online@fullcoll.edu
Emergency	Bldg 1500	714-992-7777
EOPS/CARE	Bldg 2000, 2nd Floor, Student Services	714-992-7097
Financial Aid	Bldg 100, Rm 115	714-888-7588
FINE ARTS	Bldg 1100, Rm 1115-01	714-992-7034
Food Bank	Bldg 1900, Rm 1955, Student Support Services	714-992-7162
Food Services	Bldg 200, 1st Floor, College Center	714-732-5784
FYSI	Bldg 2000, Rm 2002, 1st Floor	714-992-7073
Graduation Applications	Bldg 2000, 1st Floor	714-905-5162
Hornet Newspaper	Bldg 700, Rm 708	714-992-7134
Health Services	Bldg 1200, Rm 1204	714-992-7093
High School Outreach	Bldg 1200, Rm 1204	714-992-7093
Honors Program	Bldg 200, Rm 212, Transfer Center	714-992-7133
HUMANITIES	Bldg 500, Rm 522-0	714-992-7036 or 7128
International Student Center	Bldg 200, Rm 220, College Center	714-992-7078
Internships (Non-FC Student)	Bldg 200, Rm 225, College Center	714-992-7067
LIBRARY/LEARNING RESOURCES, INSTRUCTIONAL SUPPORT PROGRAMS AND SERVICES	Bldg 800, Library Learning Resource Center (LLRC)	714-992-7039
MATH and COMPUTER SCIENCE	Bldg 600, Rm 613-02	714-992-7041
Math Lab	Bldg 800, Rm 807, LLRC	714-992-7140
NATURAL SCIENCES	Bldg 400, Rm 411-01	714-992-7043

Office of Grants, Economic and Workforce Development	Bldg 200, Rm 225, College Center	714-992-7067
Parking	Bldg 200, Rm 225, College Center	714-992-7067
PHYSICAL EDUCATION	Bldg 1200, Rm 1206	714-992-7045
Puente Program	Bldg 2000, 2nd Floor, Student Services	714-992-7084
Registration	Bldg 2000, 1st Floor, Student Services	714-905-5162
School of Continuing Education	Rm W1, Wilshire Bldg	714-992-9500
Skills Center	Bldg 800, Rm 801, LLRC	714-992-7144
Service Learning	Bldg 200, Rm 225, College Center	714-992-7067
SOCIAL SCIENCES	Bldg 1400, Rm 1415	714-992-7047
Sports Information	Bldg 1200, Rm 1206-02	714-732-5630
Student Activities	Bldg 200, Rm 214, College Center	714-992-7095
STUDENT SUPPORT SERVICES	Bldg 200, Rm 223	714-992-7089
Study Abroad	Bldg 800, Rm 823, LLRC	714-732-5688
Teacher Pathway Program	Bldg 200, 2nd Floor, Rm 225, College Center	714-992-7067
TECHNOLOGY and ENGINEERING	Bldg 700, Rm 700	714-992-7051
Theatre Box Office	Bldg 1300	714-992-7150
Transcripts	Bldg 2000, 1st Floor, Student Services	714-905-5162
Transfer Center	Bldg 200, Rm 212, College Center	714-992-7086
Tutoring Center, Appts and Info	Bldg 800, Rm 806, LLRC	714-992-7151
Umoja Program	Bldg 500, Rm 513	714-992-7155
Veterans Resource Center	Bldg 500, Rm 518	714-992-7102
Writing Center, Appts and Info	Bldg 800, Rm 808, LLRC	714-992-7153

# Student Life and Leadership

<https://studentlife.fullcoll.edu>

**College Center, Room 214, 1st Floor – (714) 992-7095**

Student Life and Leadership is the pulse of student life at Fullerton College and prepares students to be successful by engaging them in "out of the classroom" activities, dynamic leadership opportunities, and practical learning experiences.

Student Life and Leadership provides the "hands on experience" which complement students' educational, personal, and professional goals, ultimately enhancing student success. Through a warm and inclusive atmosphere, Student Life & Leadership offers meaningful opportunities for leadership development, campus and community involvement student achievement, and engagement in student life at Fullerton College.

Programs and services offered within the Student Life & Leadership department are:

- Associated Students (A.S.)
- A.S. Benefits
- Buzzy Bites
- A.S. Care Bank
- Campus Card ID Production
- OCTA Bus Pass activation
- Clubs and Organizations
- FC Days Discount Ticket Sales
- FC Marketplace
- FC Angels Night at the Angel Stadium of Anaheim
- Hornet Leadership
- Student Center
- Students of Distinction Scholarship
- Commencement
- Diverse array of special programs and events for student life at Fullerton College

## Associated Students

**College Center, Room 222, 2nd Floor – (714) 992-7118**

Since virtually all major decisions that are made on the Fullerton College campus affect students in some way, student input to the various decision-making bodies has become increasingly relevant, necessary, and welcomed. The Associated Students Senate is the recognized "student voice" in the shared governance process of the campus community.

**Associated Students** (A.S.) consists of elected and appointed members including the Associated Students President, Vice President, Treasurer, Senators, Senate Members, and Inter-Club Council (I.C.C.) President, Vice President, Secretary and Treasurer. The Student Trustee may also attend and report at the Associated Students Senate meetings. A.S. elections are held in the fall for the current year and in the spring for the following year.

**Associated Students Senate** holds business meetings every Tuesday at 1:30 pm in Room 227, College Center, 2nd Floor. All students and guests are welcome to attend. Times subject to change.

**Associated Students** and **Inter-Club Council** provide a comprehensive student activities and club program. Events are planned with sufficient variety and provide an opportunity for all to participate.

**Inter-Club Council** meetings are every other 2nd and 4th Mondays at 1:30 pm in Room 227, College Center, 2nd Floor. All students and guests are welcome to attend. Times subject to change.

Check the **Associated Students Office** (Room 222, College Center, 2nd Floor) or the **Student Life and Leadership** (Room 223, College Center, 2nd Floor) for times and locations of all other AS, ICC, and club meetings.

## Associated Students Legal Clinic

The Associated Students Legal Clinic Attorney assists Fullerton College students, staff and senior citizens with legal concerns. This free service is provided by the Associated Students. For an appointment, call (714) 992-7118.

## Associated Students "Benefits Member Validation"

Associated Students Benefits Validation – \$12 Per Semester; Summer Benefits Validation – \$6

The Fullerton College Campus Photo Identification Card, properly validated by the Associated Students, shall allow students to receive a wide variety of valuable activities and services. The A.S. Benefits Member Validation may be purchased during registration at the Admissions and Records payment window (2000 Bldg), Campus IDs (Room 214), and in Student Life and Leadership (Bldg 200, Room 223/College Center, 2nd Floor).

- Art shows and displays
- Campus publicity and handouts
- Child Development Center support
- Day-to-day business operations of the Associated Students offices
- Discounts at over 70 local businesses (detailed listing in the A.S. Student Handbook and Academic Planner)
- Free admission (or discount) at Fullerton College Music and Art events
- Free admission (or discount) to all Fullerton College A.S. sponsored events including food event days, Homecoming activities, comedy shows, college hours, educational programs, cultural events and more
- Free admission (or discount) to all Fullerton College Mainstage Theatre events
- Free admission (or discount) to all home Fullerton College shy;athletic events (excluding tournaments)
- Free Legal assistance
- Fullerton College Bookstore discounts
- Fullerton College "FC Days" discounts on ticket sales for a variety of amusements (\$2 per ticket service charge savings)
- Fullerton College "FC Days" discounts on tickets sales for AMC and Edwards/Regal Cinemas
- Fullerton College Cosmetology discounts
- Instructional Funding, when available
- Inter-Club Council (ICC) and club involvement
- Membership in any Associated Students funded club and organization (does not include clubs not choosing to be funded)
- Music group activities – bands, choirs, ensembles

- Out-of-class learning programs — e.g., workshops, seminars, symposiums, trips
- Participation in the Campus newspaper and other student publications beyond the basic class requirements, subject to change
- Play pool, check out cue sticks, cue ball and board games in the Student Center Lounge
- State and regional student representation
- Student banquets, awards, and recognition programs
- Student Body (A.S.) Elections
- Student Center improvements
- Student Government — A.S. Senate membership
- Student research and effort toward improving Food Services, Bookstore services, bus service and parking facilities, instructor accountability, environmental clean up, and service abroad

### Services Offered and/or Supported by the Associated Students for all Students

- “FC Days” discount tickets
- A.S. CareBank — emergency assistance
- A.S. Co-sponsorship funding
- A.S. Legal Clinic — free legal assistance
- Art shows and displays
- Athletics
- Campus newspaper and other student publications beyond the basic class requirements, subject to change
- Campus Photo Identification Cards
- Campus publicity, marketing and outreach
- Child Development Center support
- Day-to-day business operations of the A.S. offices
- Instructional funding opportunities, when available
- Inter-Club Council/Club involvement
- Music group activities — bands, choirs, ensembles
- Pep Band, subject to change
- Pep Squad, subject to change
- Programs and Special Events — featuring interesting speakers, seminars, plays and entertainment
- Ski discounts at participating ski resorts
- State and regional student representation
- Student banquets, awards and recognition programs
- Student Body (A.S.) Elections
- Student Center operations
- Student Government leadership opportunities
- Student research for campus improvements

(Services subject to change)

## Athletics

### History and Tradition

Fullerton College has fielded athletic teams since the founding of the College in 1913 and since that time has developed an overall sports and intercollegiate athletic program with 21 teams that rank with the very best in nationwide community college circles.

Nicknamed the “Hornets,” Fullerton College teams have won more than their share of conference, state, and national championships in a variety of sports. Winning teams have become a tradition at Fullerton in both men’s and women’s sports.

Community support for intercollegiate athletics at Fullerton has been outstanding. The caliber of coaching, the quality of uniforms and equipment, the training and medical facilities, and the opportunity to play against good competition are superior. Every year, scores of Fullerton College graduates are offered scholarships to complete their education and athletic careers at four-year colleges and universities throughout the country.

For more information, please visit the website at [www.fchornets.com](http://www.fchornets.com) (<https://catalog.nocccd.edu/fullerton-college/student-life-and-leadership/athletics/www.fchornets.com>)

### Athletic Conference Membership

Fullerton College is a member of the Southern California Football Association (SCFA) along with 36 other colleges. The Southern California Football Association consists of two divisions: American and National. Fullerton College is in the Southern League of the National Division along with Golden West, Grossmont, Orange Coast, Palomar, and Saddleback. Competition will be against teams in the National Division along with teams from the American Division.

For all other sports, Fullerton College is a member of the Orange Empire Conference (OEC) in the following sports: basketball, baseball, beach volleyball, cross country, golf, soccer, softball, swimming, tennis, track and field, volleyball, and water polo. Members in the Orange Empire Conference consist of Cypress, Fullerton, Irvine V alley, Golden West, Orange Coast, Riverside, Saddleback, Santa Ana, and Santiago Canyon.

Conference competition is offered in ten sports for men and eleven sports for women. Each team plays a full schedule of non-conference, as well as conference games, in each sport. Each sport’s season concludes with state tournament competition for teams and individuals that have won conference championships or otherwise qualify.

### Athletic Eligibility Rules

Both men’s and women’s athletics are governed by uniform eligibility rules adopted by the California Community College Athletic Association.

In general, eligibility rules require that all candidates for a team be enrolled in and pass 12 or more units through the semester of competition. Of the 12 credit units, at least nine shall be attempted in courses counting towards the associate degree, remediation, transfer, and/or certification as defined by the college catalog, and are consistent with the student athlete’s educational plan. A full-time student returning for his/her second season of competition must have:

1. passed a minimum of 24 units between seasons of that sport (18 of those 24 units must be academic courses)
2. achieved a 2.00 GPA or higher, and
3. successfully completed at least six units during the preceding academic term in which the student is enrolled as full-time student, and
4. an educational plan on file (Fall: October 15; Spring: March 1)

A student’s previous academic record in college does not apply to the student trying out for the first time for an intercollegiate sport.

Students transferring to Fullerton College from another California community college who competed in athletics at that college must complete 12 or more units at Fullerton College before gaining athletic eligibility at Fullerton.

Any prospective student athlete with questions about his or her eligibility for sports is advised to confer with the Athletic Director or with the athletic academic counselor.

## Intercollegiate Athletics for Men

Sports in which Fullerton College fields teams for men include:

- baseball
- basketball
- cross country
- football
- soccer
- swimming and diving
- tennis
- track and field
- volleyball
- water polo

Winning is a tradition as teams participate in OEC and the SCFA Conferences.

## Intercollegiate Athletics for Women

Women's teams at Fullerton College include:

- basketball
- beach volleyball
- cross country
- golf
- lacrosse\*
- softball
- soccer
- swimming and diving
- tennis,
- track and field,
- volleyball
- water polo

\*club sport

These teams excel in the Orange Empire Conference.

## Aid to Athletes

Athletic scholarships, grants-in-aid, and special inducements or privileges for athletes do not exist at Fullerton College in accordance with State rules governing community college athletics. Student athletes are attracted to Fullerton College for its excellent educational opportunities, its tradition for winning teams, the outstanding coaching staff, and the opportunity to participate and compete as freshmen and sophomores on a level that often leads to athletic scholarship offers from four-year colleges after graduation from Fullerton.

The college provides the student athlete with uniforms and equipment, meals, lodging, travel expenses on team trips, and banquets and awards

concluding the season. The college maintains a placement office as a service to any student seeking part-time or full-time employment.

## Spirit Squad

In the Spring of each year, open-competition tryouts are held to select a Spirit Squad and dance team from incoming first-shy;semester students and returning sophomores. The Spirit Squad members rehearse during the summer in preparation for performances at school athletic events and events in a variety of local and national performances. These performances, as well as enrollment in PE 179 F, are mandatory. For information, contact the Physical Education/Athletics Division at (714) 992-7045.

## Admission to Athletic Events

Students with a Fullerton College Student Identification Card, properly validated by the Associated Students, will be admitted free of charge to all scheduled athletic events played at home. An entrance fee will be charged for playoff and championship games.

Gate receipts from the intercollegiate athletic program, including facility rentals, are used to help offset the cost of the athletic program.

## Campus Photo Identification (ID) Card

Campus Photo ID cards may be obtained in the Student Center, Room 214 of the College Center during advertised production hours. Areas/Services that prefer to have a Fullerton College Campus Photo ID Card are as follows:

- Academic Services Center, including Tutoring Center, Skills Center and Writing Center
- Associated Students, Student Center and Student Life & Leadership
- Bursar's Office for general purposes
- FC Bookstore, to purchase items by check or credit card
- FC Library to check out books
- Financial Aid for general purposes
- Labs: computer labs, circuit labs, fitness labs, Fine Arts labs, Math and Computer Science labs

The Campus Photo ID Card is only \$3.50 and is purchased once during a student's tenure at Fullerton College. There is a \$3.50 charge to replace a lost or stolen Campus Photo ID Card. A valid photo identification and current FC Schedule Bill is required to obtain the Campus Photo ID Card and semester validation.

For "Refund/Credit Information and the Required Deadline for Requests," please see the current semester's "Fees and Refunds" page in the Class Schedule and the "Quick Guide."

## College Center

### College Center, 200 Bldg

The focus of student life at Fullerton College is located at the College Center.

The College Center building features:

### FIRST FLOOR

- Cadena Cultural and Transfer Center (Room 212)
- FC Dining Hall and Patios
- Student Life & Leadership (Room 214)
- Student Center Lounge and Patio (Room 214)
- Restrooms

## SECOND FLOOR

- Associated Students/Student Government Offices (Room 222)
- International Student Center (Room 220)
- Grants/Economic & Workforce Development Office
- Facilities for Meetings and Events
- Restrooms

## Honor Societies

### Alpha Gamma Sigma

Alpha Gamma Sigma, California Community College Scholarship Honor Society, was founded in 1926 through the efforts of William T. Boyce, then Dean of the College. Among the first to be chartered, the college's chapter is designated Epsilon.

Permanent membership in Alpha Gamma Sigma is awarded to students who meet **either** of the following criteria:

1. Cumulative 3.25 GPA or higher with 60 units completed (30 units at Fullerton College) and active membership in Alpha Gamma Sigma for two (2) or more semesters; or,
2. Cumulative 3.50 GPA or higher with 60 units completed (30 units at Fullerton College) with one (1) semester of active membership in Alpha Gamma Sigma.

Requirements subject to change.

Students may pick up an application for permanent membership in the Student Activities Office. See section on Honors for Scholarship.

### Lambda Epsilon Chi (LEX)

Lambda Epsilon Chi (LEX) is a national honor society established to recognize students who demonstrate superior academic performance in an established program of paralegal and law-related studies. LEX derives from the Latin root meaning "pertaining to the law" or "legal."

Students in the Fullerton College Paralegal Studies Program qualify for membership if they have:

- Completed at least two-thirds, or 18 units, of their required major coursework
- A cumulative GPA of 3.25 or higher for all college coursework, and
- A cumulative GPA of 3.5 or higher for all Paralegal Studies major coursework

Applications for consideration may be obtained by emailing the Business and CIS Division Office at: [fcparalegalstudies@fullcoll.edu](mailto:fcparalegalstudies@fullcoll.edu).

### Phi Theta Kappa

Phi Theta Kappa Honor Society is the national scholastic honor organization for community colleges. In order to be eligible for Lifetime Membership in Phi Theta Kappa International Honor Society, a student must:

- have completed 12 units of coursework that may be applied to a degree
- be enrolled in at least three units in the current term, and
- maintain a 3.25 GPA

For more information, contact the current Phi Theta Kappa officers at [ptk.fullcoll@gmail.com](mailto:ptk.fullcoll@gmail.com) or go to the chapter website, [PTK.fullcoll.edu](http://PTK.fullcoll.edu) (<http://PTK.fullcoll.edu>). Requirements subject to change.

## Student Center

**College Center, Room 214, 1st Floor – (714) 992-7095**

The Student Center Lounge and Patio allows students to play video games, air hockey and billiards, watch a big screen TV, study, or just relax with friends.

The Student Center Lounge and Patio is open during regular hours:

- Mondays, Wednesdays and Thursdays from 8:00am to 5:00pm
- Tuesdays from 8:00am to 6:30pm
- Fridays from 10:00am to 2:00pm

During special events and programs held at the Student Center, the lounge areas will be closed. Hours are always subject to change.

Announcements are posted in the Student Center concerning FC Days discount ticket sales, student housing, transportation, Student Life & Leadership development, club activities, general information of interest to students, upcoming events and many other services available to students and staff.

## Student Offices - Eligibility Requirements

Student leadership is recognized as a most important facet of decision-making at Fullerton College whether it be for planning Associated Student projects or participation with administrators and faculty in shared governance or overall college development. It is important to the student body, the college and the individual student that student leaders do satisfactory work in their courses of study and are able to carry sufficient units to be true representatives of their constituents. There are three phases to be considered for establishing and maintaining one's eligibility. They are:

1. Previous School Record
2. The Semester of Candidacy
3. The Semester While In Office

To review the complete minimum eligibility requirements, please:

- contact the Office of Student Activities (714) 992-7095
- stop by Room 223 of the College Center, 2nd Floor, or
- visit the Student Activities website: <http://activities.fullcoll.edu> (<http://activities.fullcoll.edu/>).

## Student Publications

### The Hornet

This is award-winning news outlet is published online by journalism students. The digital news site is entirely written, edited, designed and

desk-top published by students. Photographs, illustrations, videos and podcasts are all student efforts. Students also sell and design advertising. The Hornet has won many state and national awards, including the Gold Crown, the top national honor presented by Columbia University's Scholastic Press Association, as well as honors from the Journalism Association of Community Colleges (JACC).

### Inside Fullerton Magazine ( *formerly Torch magazine* )

This magazine is published each semester by journalism students. All phases of magazine production – writing, editing, layout/design, and photography, line illustration and advertising, are accomplished by students. Articles and photos combine to share stories from and about the Fullerton College community. The magazine is used on and off campus as an informative, marketing tool. Torch Magazine has also received numerous awards from collegiate and professional organizations for outstanding journalism.

### La Antorcha

This is the first student-produced, online Spanish language publication in the California Community College system. This multimedia news outlet was created to cover the growing population of Spanish speakers in the region and to address topics and stories from the community and regional culture that were not being properly addressed. The digital aspect makes it possible to share videos, photos and stories with a global audience and all of it reported by bilingual Fullerton College students.

## Students of Distinction

Each year, Student Life & Leadership, through the assistance of a campus-wide committee, selects up to 20 "Students of Distinction" scholarship award. The top 20 students are honored for their outstanding achievement in one of the following four categories:

- Academic Achievement
- Competitive Achievement
- Personal Achievement
- Service Achievement

The top two students are chosen as the "Distinguished Student of the Year" and are awarded an additional scholarship graciously funded by the Dr. Janet and Henry Emoto Scholarship and the District Management Association. The 20 distinguished students come from diverse fields such as music, communications, theatre, intercollegiate athletics, club activities, student government, individual service to the college and/or community, and outstanding academic scholarship within a given department.

The Scholarship Awards Program is held in the Spring and represents the highest honor a student may receive while at Fullerton College.

For more information, please contact Student Life & Leadership, College Center, Room 214, 1st Floor - (714) 992-7095.

For more information, contact the Student Activities Office, Room 223, College Center, 2nd Floor, (714) 992-7095.

## Support Programs and Services

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## Academic Support Center (ASC)

800 Bldg (LLRC), 1st Floor – (714) 992-7065

The Academic Support Center (ASC) provides free services to ALL Fullerton College students to help them achieve academic success. The ASC is comprised of these related areas: Skills Center, Tutoring Center, Writing Center and instruction support programs such as FC MILES and Hornets Tutoring.

### FC MILES

(714) 992-7168 Room 801B

Email: [fciles@fullcoll.edu](mailto:fciles@fullcoll.edu)

Website: <http://academicsupport.fullcoll.edu/fc-miles> (<http://academicsupport.fullcoll.edu/fc-miles/>)

This math institute is a non-credit computer-based math enhancement program that aims to improve students' math skills through a non-traditional classroom setting.

### Hornets Tutoring

(714) 992-7175 Room 1956A

Email: [hornetstutoring@fullcoll.edu](mailto:hornetstutoring@fullcoll.edu)

Website: <http://hornetstutoring.fullcoll.edu>

Hornets Tutoring offers embedded tutoring support for students in specific classes and disciplines.

### Skills Center

(714) 992-7144 Room 801

Email: [skillscenter@fullcoll.edu](mailto:skillscenter@fullcoll.edu)

Website: [http://\(http://skillscenter.fullcoll.edu\)skillscenter.fullcoll.edu](http://(http://skillscenter.fullcoll.edu)skillscenter.fullcoll.edu)  
(<http://skillscenter.fullcoll.edu>)

- Self-paced support for skill development in study skills, critical thinking, science, English and a variety of other subjects
- Administration of make-up exams for all Fullerton College courses
- Instructional lab support for courses in reading, English as a Second Language, foreign languages, and writing

## **Tutoring Center**

(714) 992-7151 Room 806

Email: [tutoringcenter@fullcoll.edu](mailto:tutoringcenter@fullcoll.edu)

Website: <http://tutoringcenter.fullcoll.edu>

- Free tutoring for most college courses by CRLA-trained, faculty-recommended tutors
- Walk-in tutoring for accounting, chemistry, physics, math; appointment tutoring for most other academic subjects
- Various workshops offered each semester
- Computers available for academic use (not available during any campus closure)

## **Writing Center**

(714) 992-7153 Room 808

Email: [writingcenter@fullcoll.edu](mailto:writingcenter@fullcoll.edu)

Website: <http://writingcenter.fullcoll.edu>

- One-on-one writing consultations
- Assistance with all stages of the writing process in all disciplines
- Appointments available: 30-minute sessions (2) per week; DSS and EOPS students may receive additional time
- Walk-in tutoring often available.
- ESL Specialist tutors provide individual and small group tutoring, workshops and conversation groups



## Admissions and Records

**2000 Bldg, 1st Floor** – <https://admissions.fullcoll.edu/>

The Admissions and Records Office assists prospective, new, current/continuing, returning, and alumni students with the following services:

Admission and residency determination of all students including specific student populations i.e., AB540, Veteran, EOPS, DSS, Foster Youth, Promise, special admit/concurrent enrollment, dual enrollment, and student athletes.

Registration services including priority registration, registration/myGateway assistance, registration set up, student coding for special populations, and mass communications to students. Assist in the development of the class schedule and college catalog, provide reports and technical support to students, faculty, staff, and other district personnel.

Retrieve, maintain accuracy, and distribute student records including student transcripts, verifications of enrollment, incoming other college transcripts, high school transcripts, subpoena requests, petitions, grades, verify athletic eligibility, state mandated compliance audits, and report attendance data to appropriate state/federal agencies.

Evaluation of graduation requirements, awarding of AA/AS/ADT degrees, evaluation of incoming college transfer coursework towards graduation, course substitutions, course repeat adjustments, academic renewal, and the ordering and distribution of graduation diplomas.

In compliance with local, state, and federal regulations Admissions and Records interprets and ensures adherence to regulations i.e.; Title 5, Education Code standards, FERPA and all other regulations related to student privacy.

Provides information, guidance, and support to students, faculty, campus staff, administrators, North Orange County Community College District staff and administrators, and the community at large.

We promote a sense of community and embrace and value the diversity of our entire community. We commit to equity for all we serve.

## Assessment and Orientation Center

**3000 Bldg, Rm 3023** – (714) 992-7117

The Fullerton College Assessment Center supports students through the assessment process (AB705) by collecting transcripts (high school and other colleges), test scores (AP, IB or EAP), administering placement tests in English as a Second Language (ES), Chemistry and offering Group Advising sessions.

Upon completion of the assessment/orientation process, students will attend a Group Advising session..

For more information, students can visit this website: <https://assessment.fullcoll.edu>.

## Bookstore

**2000 Bldg, 1st Floor**

Offering all of the materials needed for Fullerton College students to succeed in their education, the Bookstore is located in the Student Services Building (2000) facing Chapman Avenue. A complete selection of the

textbooks and course materials required or recommended by faculty is arranged in easy-to-locate fashion by department, course numbers and CRN. In addition, extensive classroom and office supplies, study aids, college clothing, giftware, small electronics, books, and snacks are available in the store.

During the semesters, the Bookstore is open Monday through Thursday 7:30 am to 6:00 pm, and Fridays 7:30 am to 3:45 pm.

Special hours for breaks, holidays, rush periods, and inventory are posted in the Bookstore, at <http://bookstore.fullcoll.edu> and on Facebook.

Students may also call (714) 992-7008. Online textbook ordering at [shy/http://bookstore.fullcoll.edu](http://shy/http://bookstore.fullcoll.edu).

## Cadena Cultural Center

**College Center, Room 212, 1st Floor** – (714) 992-7086

The Cadena Cultural Center is a dynamic department within the Fullerton College Counseling Division and is connected to the Transfer Center. As the campus cultural center, we serve as a network ("Cadena"); connecting students, faculty and staff with each other to celebrate our diverse backgrounds, engage in meaningful dialogue about diversity, and access support services. We strive to foster a sense of belonging and promote student success.

The entire campus community is invited to collaborate and participate in our center activities and services, including:

- Cultural Celebrations
- Tours to local museums and cultural sites
- Guest speakers and seminars
- Student forums and conversation circles
- Library of films and documentaries
- Worldfest
- Campus cultural and diversity events calendar

## CalWORKs

**315 N. Pomona (west of campus between Whiting and Wilshire)**  
**(714) 992-7101**

The CalWORKs Program is designed for students who are receiving AFDC/Welfare. Students are assigned to a CalWORKs Counselor who provides the guidance and support needed to achieve academic success while meeting welfare-to-work requirements. A team approach is used to advocate for student rights. Services include:

- Academic, career, and personal counseling
- Child care grants for both on- and off-campus child care
- Referral to both on- and off-campus resources for basic needs and emergency support services which include housing/emergency shelter, food, clothing, rental and utility assistance, mental health, etc.
- Collaboration with on-campus programs in order to ensure student needs are met (DSS; EOPS/CARE; Financial Aid; Skills Center, etc.)

Students who are considering applying for cash aid are encouraged to schedule an appointment with a CalWORKs Counselor prior to application, in order to secure an overview of the county CalWORKs Program requirements. Students that have been sanctioned and want information

regarding how to cure their sanction are also encouraged to contact the office. Office hours: Monday-Friday, 8 am-5 pm.

## CalWORKs Program Eligibility

- Parents as well as children must be receiving cash aid (i.e., parents who are no longer receiving cash aid and are only receiving cash aid for their children are not eligible);
- Must be able to provide proof of program eligibility via county documentation in order to receive CalWORKs program services;
- No unit minimum.

## Campus Dining

**200 Bldg – (714) 732-5784**

The Food Court, located in the College Center (Building 200), features several branded concepts including The Grille at Fullerton, Wholly Habaneros, Slice of Life Pizza and Pasta, Buzzy's Deli-Salad Station, Simply-To-Go featuring a wide variety of freshly made grab-and-go items, and Jamba Juice.

Stinger's Café, located in the Historic Library Courtyard (Building 840), offers Starbucks coffees and espressos with Simply-To-Go items made fresh daily.

Beverage and snack vending units are located throughout the campus for 24/7 availability.

## CARE - Cooperative Agencies and Resources for Education

**2000 Bldg, 2nd floor, Room 2002 – (714) 992-7073**

CARE was established by the State of California in 1982 as a supplemental component of EOPS to provide support services and activities for the single, head of household student, who also receives CalWORKs/TANF funds as income assistance. This program was designed to promote self-sufficiency through education, training and student support services. The CARE program offers the following services to eligible participants:

- Academic Counseling
- Auto Repair Reimbursements
- Book Service Award
- Educational Supplies
- Transportation Support (parking permits, bus passes and/or gas cards)
- Campus Meal Cards
- Seminars, Workshops and Motivational Events
- Life, Career and Academic Planning
- EOPS/CARE Counseling Courses
- Community Resources and Referrals
- Application Support (Financial Aid, Scholarship, Transfer, Job...)
- Tutoring

## CARE Program Eligibility

- Must be eligible for the EOPS Program
- Student parent must be 18 years of age or older
- Must have at least one child 18 years old

- Be declared as single head of household by county
- Currently receiving cash aid benefits (or dependent child[ren] are receiving cash aid)

There are additional program requirements that a student must meet each semester to remain eligible and served by CARE. Please contact the EOPS/CARE office for more information.

## Career Center

**2000 Bldg, 2nd Floor – (714) 992-7121**

The Career Center's mission is to provide students assistance with making informed decisions and choosing a major and career. The Career Center embodies Fullerton College's vision, creating a community that promotes inquiry and intellectual curiosity, personal growth and a life-long appreciation for the power of learning. The Career planning process encourages students to research, network, and experience their choices to begin career exploration in order to make and/or confirm their decisions (as described on our website). Services are available to students throughout the career development process which include:

- career research assistance to facilitate career exploration
- career counseling to assist with career decision-making (during non-registration times)
- workshops on various career development topics
- resume and cover letter writing assistance
- mock interviews
- career-related assessments (free and fee-based)
- online occupational and educational databases
- postings of full-time, part-time, and temporary employment opportunities

## Career Education (CTE)

<http://cte.fullcoll.edu>

**700 Building, Room 719-01  
(714) 992-7585  
(714) 992-7190**

Career Education (CTE) programs focus on developing skills related to a specific job and engages students in hands-on training and does not rely on traditional teaching methods of instruction. Additionally, CTE curriculum aligns directly with industry needs so students are properly skilled. CTE programs partner with business and industry to offer internships and job opportunities. Scholarships are also available for many of our programs.

Fullerton College offers over 125 robust Career Education programs and over 90 related degrees. The Office of Career Education at Fullerton College manages recruitment, marketing and outreach strategies to promote awareness of CTE pathways to current and new students, as well as high schools, business and industry, community-based and non-profit organizations, and workforce investment boards.

There are many CTE program certificate and degree options available at Fullerton College. To assist students in exploring career pathways, CTE

counseling is also available by appointment. For more information, visit the CTE website.

## Child Development Laboratory School

1830 Bldg - (714) 992-7069

The **Child Development and Educational Studies Laboratory School (CDES Lab School)** has been in continual operation since 1959 and is an important component of the Child Development and Educational Studies Department and Social Sciences Division. The Lab not only provides a quality educational environment for pre-school aged children and their families, it also serves as a training and demonstration program school for students interested in the fields of Child Development and Early Childhood Education. The CDES Lab School serves as a practicum placement site for Fullerton College students.

The Lab is licensed by the Department of Social Services, and funded in part by the State Department of Education. The center serves families without regard to sex, race, religion, ethnicity or sexual preference and makes every effort to accommodate children with varying abilities.

The Lab School is open year round, Monday through Friday, 7:30 am-6:00 pm, but is closed for specific campus holidays. All children in attendance receive a nutritious breakfast, lunch and afternoon snack.

There is typically a waiting list to attend the Lab School. Preference is given to Fullerton College students, faculty, and staff; however, families from the community are strongly encouraged to apply.

### Center for Early Childhood Collaboration

The **Center for Early Childhood Collaboration (CECC)** was established by faculty in the Child Development and Educational Studies department to advise and support the early childhood community and workforce through consultation, professional development and educator tours of our Laboratory School. The CECC works directly with early childhood administrators and their teaching staff to assess program needs and deliver tailored strategies to support quality improvements. The overall commitment of the CECC is to promote and help build quality programs for young children and their families throughout Orange County and beyond.

For more information contact Dr. Tom Chiaromonte  
tchiaromonte@fullcoll.edu.

#### The CECC Staff

Tom Chiaromonte  
Jenn Kinkel  
Karin Pavelek  
Sonia Semana

## Counseling and Student Development

2000 Bldg, 2nd Floor – (714) 992-7084

The Fullerton College Counseling and Student Development Division provides services for students through the Counseling Center, Career and Life Planning Center, Cadena Cultural and Transfer Center and the Assessment Center. In addition, the division provides student development courses in personal and educational planning. (See course offerings under Counseling.)

The Counseling Center also provides e-advising. This web-based email service is available on the Fullerton College website and allows students

to ask general counseling questions. This service is not intended to take the place of in-person appointments, but rather as a resource for general questions.

The Counseling Center offers new, continuing and returning students individual appointments with counseling faculty to:

- Assist students in appropriate selection of math\*, English\* and other courses depending on students educational goal
- Assist students in clarifying their career goals
- Assist students in preparing a Student Educational Planning Program (SEPP)
- Provide information on college policies and regulations
- Provide orientation and new student group advising
- Provide students with information on transfer, major preparation, and general education requirements
- Provide students with progress checks for certificates, associate degrees and transfer requirements
- Provide unofficial evaluations of other college transcripts
- Provide walk-in general information counseling

\*Prerequisite courses will no longer be needed for students to get into math and English classes at a transfer level. This is due to a California Bill known as Assembly Bill 705.

## Disability Support Services

840 Bldg, Room 842 – (714) 992-7099

The Disability Support Services (DSS) office provides a variety of services for students with documented disabilities, including learning disabilities, visual, hearing and mobility impairments, psychological conditions, acquired brain injuries, and other medical disabilities. Services are provided in compliance with state and federal legislation.

In accordance with federal and state regulations, procedural language has been established to address the provision of educational accommodations to students with disabilities who are otherwise qualified to participate in the College's courses, programs and activities.

The DSS office supports students in achieving their educational goals by providing services and accommodations in a timely and effective manner.

Students who have a verifiable disability qualify for support services through the DSS office. The services are designed to support students in the achievement of their academic and career vocational goals. Reasonable accommodations are determined by the DSS counselor/specialist on an individual basis. Services and accommodations are based on the educational abilities and functional limitations unique to each student.

In order to receive services from DSS, one must:

1. Be currently enrolled as a Fullerton College student; and
2. Provide detailed documentation of a disability from an appropriate professional and/or participate in the learning disability assessment process through DSS.

### Services That May Be Provided

- Test taking accommodations
- Specialized counseling

- New DSS student orientation
- Early registration accommodation
- Alternate media
- Notetaking assistance
- Interpreting services
- Learning disability assessment
- Assistive and adaptive technologies
- Adaptive computer and learning strategies classes

## EOPS - Extended Opportunity Program and Services

2000 Bldg, 2nd Floor – (714) 992-7097

Extended Opportunity Program and Services is a support services program designed to provide entry, retention and transition services for educationally and economically disadvantaged students. These support services are designed to assist and contribute to the shy;student's academic success.

The EOPS Program offers the following services:

- Priority registration
- Orientation to the EOPS Program
- One-on-one over and above academic advising by an EOPS Counselor
- Personalized case management by a Student Services Specialist
- Book Service Award/Lending Library
- Financial Aid and scholarship information
- Tutoring services and workshops
- Transfer assistance and fee waivers
- Outreach and recruitment services
- Special events and activities

### Information on Eligibility

The following eligibility criteria apply in order for a student to be considered for the EOPS Program:

- Completed less than 40 units of college level coursework
- Educationally disadvantaged as determined by the EOPS Program
- Enrolled full time (12 units) when accepted by the EOPS Program
- Qualified to receive the California Community College Promise Grant (CCCPG), formerly known as the BOGG Fee Waiver
- Resident of California or AB540 student

## Financial Aid

100 Bldg, Room 115 – (714) 888-7588

### Financial Aid Office Mission

The mission of the Financial Aid Department is to provide information and financial aid support to all eligible students attending Fullerton College. Staff members are devoted to the educational needs of all individuals in the community and the varying specific educational needs of our students. Whatever the student's major or career goal, Financial Aid helps the students know more about Financial Aid and the application process at Fullerton College. Their motto is "Financial Aid and You: Working Together for Student Success."

## Application Procedure

Students wishing to apply for financial aid should submit a FAFSA (Free Application for Federal Student Aid) at [www.fafsa.gov](http://www.fafsa.gov) (<http://www.fafsa.gov>) and list the Fullerton College school code, which is 001201. The application period for financial assistance for the 2017-2018 school year is January 1, 2017 through June 30, 2018. Students are strongly encouraged to select the IRS Data Match on the FAFSA to expedite the processing of their financial aid file. When the student receives his/her SAR (Student Aid Report) from the Department of Education, the next step is to go to the Fullerton College website, sign into myGateway, click on Student Links and follow the applicable steps. Complete any supporting documentation as requested on myGateway.

## Eligibility

Specific eligibility requirements may be found in the Consumer Brochure on the Fullerton College Financial Aid website. Basic Federal grant eligibility criteria are as follows:

- Demonstrates a financial need according to a recognized Federal system on need analysis
- Does not owe a repayment on any previously-received Federal grants
- Does not yet possess a Bachelor's Degree
- Enrolled as a regular student in an eligible program
- Has no drug-related convictions while on Financial Aid
- Maintains satisfactory academic progress
- Males must be registered with the Selective Service System
- May not be in default on any Perkins, Stafford, Plus or Direct Loan
- Possesses a high school diploma, GED certificate
- Student must be a U.S. citizen, or eligible non-citizen
- Working toward a degree or certificate program

Basic Loan eligibility criteria are:

- Demonstrates a financial need
- Enrolled in at least 6 active units (half time)
- Maintains satisfactory progress
- Prior loan aggregate amounts are taken into account to determine loan eligibility

## Programs

### Federal Pell Grant

A grant from the Department of Education to students for educational expenses based on need

### Federal Supplemental Education Opportunity Grant (SEOG)

Designed to assist students who have exceptionally high financial need and are eligible for the Pell Grant

### Federal Work-Study (FWS) Program

Provides jobs for students who need financial aid and meet the need and eligibility requirements. FWS allows students to earn money to help pay for educational expenses. Must be enrolled at least half time and say "yes" to the WorkStudy question on the FAFSA Application.

## Federal Direct Subsidized Loan Program

Provides students with low-interest loans for educational expenses (which are subsidized by the government as long as the student is enrolled at least half-time in college courses). The interest rate may vary from year to year.

## Federal Direct Unsubsidized Loan Program

Provides loans for students who do not qualify, in whole or in part, for subsidized loans. Authorized under a federal law called the Higher Education Amendments of 1992, the terms of the unsubsidized loans are the same as the terms for subsidized loans, except the interest begins to accrue immediately, and can be paid quarterly or capitalized and paid at the end.

## Cal Grants

Cal Grant is a grant offered by the State of California and is open to California residents and Dream Act students attending a college or university in California. The grant has an annual application deadline of March 2 for the following academic year, and is based upon need, income, and GPA. There is an additional deadline of September 2 for California Community College only. Students must file both a completed FAFSA or Dream Act application, and a GPA Verification Form prior to the deadline, in order to be considered. NOTE: Students who have over 24 completed units at Fullerton College will have their GPA transmitted automatically to the State if the student attended Spring 2013, Summer 2013, Fall 2013 or Spring 2014. These students do not need to complete the GPA Verification process. All other students (if attempted less than 24 units) need to complete a GPA Verification form and take the form to their prior high school or college to be certified. Additional information on Cal Grant is available in Fullerton College's Cal Grant brochure on the financial aid website.

## Full-Time Student Success Grant

Senate Bill 93, the 2015 Budget Act, was signed by the Governor on June 25, 2015, and includes language initiating a new grant program for California Community College students. The program provides funding to the California Community College Chancellor's Office (CCCCO) to provide for supplemental grants beginning the 2015-2016 AY (anticipating ongoing funding) to community college Cal Grant B recipients who have already received a full-time Cal Grant B award payments.

## Board of Governors' Enrollment Fee Waiver

BOG-FW, or Board of Governor's Fee Waiver, is a State-sponsored program that waives enrollment fees for qualifying students who are California residents or Dream Act students. Students may be eligible for a fee waiver even if they are not eligible for other financial aid. BOG-FW applicants do not have to be enrolled in a minimum number of courses — whether the student takes .5 units or 26 units, the enrollment fee may be waived. BOG-FW applicants only need to apply once to have fees waived for the academic year: summer, fall, winter and spring.

### How Do Students Apply?

To apply for the BOG-FW, students must complete the application which can be accessed through myGateway and clicking on the Financial Aid link on Webstar. There are four methods under which students may apply. Students only need to qualify for one method to have their fees waived. Students submitting a BOG application may also need to submit proof of prior year income such as 1040 Federal tax return and W2s. Electronic signatures for the BOG application are available for students and parents on the 2017-2018 application.

### Method A

For students on public assistance programs: TANF/CalWORKS, SSI/SSP, SSAI, SSAS, or General Assistance. Certification must be obtained from the appropriate agency and documentation will be required to verify a student's eligibility. Most documentation must be dated within the last 30 days.

### Method B

For low-income students whose previous year income was within qualifying income guidelines. Federal tax returns may be required.

### Method C

This is awarded to students who applied through the FAFSA or Dream Act application and were eligible according to Federal guidelines. Students who qualify under Method C do not need to complete a separate BOG-FW application.

### Method D

BOGW - D: For Homeless Youth - At the time of enrollment, student is a homeless youth as defined in Section 68432.7, which states that "Homeless youth" means a student under 25 years of age, who has been verified at any time during the 24 months immediately preceding the receipt of his/her application for admission by a post-secondary education institution that is a qualifying institution defined in subsection (2) of Section 725 of the Federal McKinney-Vento Homeless Assistance Act (42 U.S.C. Sec. 11434A (2)).

### Method F

BOGG F is for Dependents of Disabled or Deceased California Veterans or National Guard, recipients of the Congressional Medal of Honor, children of recipients of the Congressional Medal of Honor, or dependents of victims of the September 11, 2001 terrorist attack. Certification must be obtained from the appropriate agency and documentation will be required to verify a student's eligibility. Most documentation must be dated within the last 30 days.

## Return to Title IV

Return to Title IV funds is a federal law regarding a student's responsibility in paying money back if the student leaves school. If a student receives a grant and then withdraws from all of his/her classes, that student may owe money back to the Federal Program. According to the date of withdrawal, the Financial Aid Office will calculate the part of the grant the student earned and what is owed. NOTE: if the withdrawal was after earning 60% of the grant, the student will not owe any repayment. For the full policy, or more information, click here ([http://financialaid.fullcoll.edu/pdf/Consumer\\_Brochure\\_2019-2020\\_rev\\_2019-06-06.pdf](http://financialaid.fullcoll.edu/pdf/Consumer_Brochure_2019-2020_rev_2019-06-06.pdf)).

## Financial Wellness

Fullerton College has taken the required steps to guide our students to become successful students as well as learn how to become debt free. There are currently three resources available to students that will lead them to become financially literate and help our students become financially independent from debt. The resources may be found on the Financial Aid website under Financial Wellness.

1. CASH COURSE:
2. iGrad Platform
3. \$ALT

## Foster Youth Success Initiative (FYSI)

2000 Bldg, 2nd Floor, Room 2002 - (714) 992-7073

The Foster Youth Success Initiative (FYSI) Program is committed to supporting ambitious, college-bound students exiting the foster care system. Fullerton College created a support network for current and former foster youth that includes many student support services and programs on campus and that extends to local agencies in the community that deliver services and aid to foster youth students.

The FYSI Program offers the following services:

- Priority registration
- Textbook assistance
- Transportation assistance
- Backpack and educational school supplies
- Assistance with student fees: Health Fee/Student ID Card/AS benefits
- Workshops and conferences
- FYSI Program Assistant and High School Outreach
- Foster Youth Liaison
- Academic counselors
- Campus print accounts
- Childcare assistance
- Campus tours
- Community and campus referrals

To be eligible for the FYSI Program students must:

- be current OR former Foster Youth under the age of 35
- complete an FYSI Online Application (<https://fosteryouth.fullcoll.edu>)
- provide "Ward of Court" letter
- be enrolled in a minimum of six (6) units

Transfer students must not have more than 40 degree applicable units. Students with an Associate Degree or higher are not eligible.

## Health Services

1200 Bldg, Room 1204 – (714) 992-7093

Health Services provides health care and personal counseling to the students of Fullerton College. Health Services is open from 9:00 am-5:00 pm Monday/Wednesday/Thursday; 10:00 am-6:30 pm Tuesday; and 9:00 am-4:00 pm Friday during the Fall and Spring terms. The summer schedule is variable. The mandatory health fee (payable at time of registration) includes the following services:

- **Clinical Medicine** – Physician and nurse-practitioner consultation by appointment, diagnosis and treatment are free of charge. Clinical laboratory testing,<sup>1</sup> radiology referral and follow-up,<sup>1</sup> medications and/or prescriptions,<sup>1</sup> minor surgery,<sup>1</sup> referral to community hospitals/specialists.

<sup>1</sup> Available at low cost for students.

- **Crisis Intervention and Personal Counseling** – Individual consultation with a licensed psychologist based on crisis intervention model. Referrals available to private and community health agencies.
  - **Health Care** – Health/wellness counseling, screening for immediate or follow-up care, emergency care for illness, first aid for traumatic injuries, maintenance of health records, accident reporting, health education, referral to community agencies. A student accident insurance plan<sup>1</sup> is maintained by Health Services.
- <sup>1</sup> Deductibles and limitations apply.

## Your Health Fees at Work

Student Health Services provide all of the services students would find in a routine medical clinic. Most of the services, such as a visit to the physician, nurse practitioner, RN, psychologist, or health educator, are at no cost to students. Laboratory tests, immunizations, medications, pelvic exams and employment or wellness exams are provided at very low fees. [HOURS: Nurses are available from 8:00 am-7:00 pm Monday through Thursday and from 8:00 am-5:00 pm on Fridays. Physicians, Nurse Practitioners, Health Educator, and Psychologists available by appointment.]

## Housing

The College does not have a student housing facility. A list of housing is available to students in Student Activities, Room 223, 2nd Floor, College Center. Included is information on rentals, rooms for rent, apartments for rent, roommates wanted, roommates available, and brochures.

## International Student Center

College Center – Room 220, 2nd Floor – (714) 992-7078

The International Student Center (ISC) provides services to students on the F-1 visa and F-2 visa as well as to students who wish to apply for F-1 status. The ISC is a full-service office dedicated to supporting international students both academically and personally. International students benefit from specialized and individual attention. Services and programs include:

- International admissions (new, transfer, and change of status students)
- Academic counseling
- Immigration advising
- New Student Orientation and Welcome Week activities
- Housing and American host family resources
- Employment authorization and resources
- Cultural activities and social events
- California Cousins Mentor Program

More information on the F-1 student visa can be found at <http://educationusa.state.gov> and at [studyinthestates.dhs.gov](http://studyinthestates.dhs.gov) (<http://studyinthestates.dhs.gov>).

## Library Services (LLRC)

Library/Learning Resources - 800 Building  
(714) 992-7039 - <https://library.fullcoll.edu> (<http://library.fullcoll.edu/>)

The mission of the library is to assist students, faculty, and staff in attaining their educational and informational goals in a supportive library

environment by offering a combination of innovative and traditional library services. The Library offers:

- Online, asynchronous library and information literacy workshops
- Friendly and helpful library staff
- Reference assistance and instruction
- LIB 100 F (Introduction to Research) and LIB 100HF (Honors Introduction to Research) courses
- One-on-one research appointments
- Fun events for students
- Hard-copy and online books, magazines, journals and newspapers
- Inter-library loans
- Course reserve materials
- Fullerton College Archives
- Laptops (visit <https://news.fullcoll.edu/laptops-available-to-students/>)
- Photocopying, printing and scanning (*not available during campus closures*)
- Computers with Microsoft Office (*not available during campus closures*)
- Adaptive workstations (*not available during campus closures*)
- One Button Studio (*not available during campus closures*)
- Group study rooms (*not available during campus closures*)

## Lost and Found

The central location for all lost and found articles is the Campus Safety Department located in the 1500 Building. Articles will be tagged, logged, and properly secured for 90 days. Items may be claimed at the Campus Safety Department.

## Math Lab

**800 Building, Room 807 – (714) 992-7140**

The Fullerton College Math Lab, located in the LLRC, has been in continuous operation since 1967. It provides services in a supportive environment where students can receive supplemental support services specific to courses, textbooks and instructors. The Lab offers individual tutoring, CD and DVD lectures, computer tutorials, online homework programs, individual and group study locations, and a place for make-up quizzes and tests to be administered. During the first week of classes each semester, eligible students may visit the Math Lab and receive class orientations explaining the services offered. Student attendance is tracked electronically when students scan in and out of the Lab using their student ID cards.

The Computer Science Lab is located inside the Math Lab. This lab supports classes in the Computer Science Department.

See the website for hours of operation and other information - <http://math.fullcoll.edu/mathlab.html>

## ROTC

Through arrangements with local universities, reserved officer training is available to students of Fullerton College. For more details concerning concurrent enrollment, scholarships, requirements, and opportunities with the three branches of the armed services, contact the following:

### Air Force ROTC

Captain Landgraf  
Loyola Marymount, Los Angeles  
(310) 338-2770

### Army ROTC

Mr. Steven Yach  
California State University, Fullerton  
syach@fullerton.edu  
(657) 278-3527

### Navy ROTC

Lieutenant Hester  
University of California, Los Angeles  
(310) 794-9425

## Security Escorts

Campus Safety Officers are on campus 24/7 and can provide an escort at any time. Campus Safety's business phone line is (714) 992-7080, ext. "0" and their emergency phone line is (714) 992-7777. Campus Safety can also be reached by using the Emergency Phones located throughout the campus and the 4-story parking structure.

## Service Learning

**College Center, 2nd Floor, Room 225 – (714) 992-7067**

Service Learning provides the opportunity for students to connect the classroom to the community. These real-world experiences result in active, enhanced learning, civic engagement, commitment to helping others and helping provide solutions regarding issues that affect the community and world.

## The Puente Project

**2000 Bldg, 2nd Floor – (714) 992-7084**

The Puente Project is an academic, counseling and mentoring program that has improved college persistence and success rates for thousands of California's educationally under-served students. The Puente mission is to increase the number of community college students who:

- transfer and enroll in four-year colleges and universities
- earn college degrees
- return to the community as mentors and leaders

## Program Benefits

- guaranteed English and Counseling courses for one year
- academic counseling
- mentoring and networking with community leaders
- leadership and volunteer experience
- university tours and transfer preparation

## Program Eligibility

- must be enrolled full-time for Fall and Spring semesters (12 units or more each semester)
- mandatory attendance to all free Puente events
- must be eligible to enroll in English and Counseling courses as part of the Puente Cohorts

## Transfer Center

College Center, Room 212, 1st Floor – (714) 992-7086

The Transfer Center is a dynamic campus resource available to help Fullerton College students stay motivated, excited, and prepared to transfer to a four-year university. There are many steps to transfer, from college exploration to college selection, major exploration to major preparation, not to mention the entire application process. The Center provides services to help students explore, prepare, and succeed in their transfer plans. Services and activities include the following:

- Information on transfer, admissions, deadlines and resources
- Appointments with academic counselors to help students create education plans
- Appointments with university representatives
- Application assistance
- College fairs held every Fall and Spring semester with representatives from the CSU, UC, private and out-of-state institutions in attendance
- Computer stations with internet access for any college-related research
- Field trips to California colleges and universities
- Basic financial aid and scholarship information and listings
- Monthly e-newsletter providing the most recent transfer information and services
- Major prerequisite information (guide sheets and internet sources)
- Seminars and workshops on transfer planning for UC/CSU/Private/Out-of-State universities

## Umoja Program

500 Bldg, Room 513 – (714) 992-7155

The Umoja Program is designed to provide essential educational support and services to increase the academic success, retention, degree completion, and transfer rates of African-American and other students enrolled at Fullerton College. They accomplish this through monthly workshops, academic counseling, and mentoring. Their aim is to develop a sense of “community” among African-American students, other students, faculty, staff and administrators.

The Umoja Program provides:

- Motivation by offering inspirational workshops and events throughout the semester
- Connection to campus resources and other support services
- Academic help through study groups and tutoring
- Cultural understanding by providing educational forums and events that reflect and discuss African-American culture and history

## Veterans Resource Center

500 Bldg, Room 518 – (714) 992-7102

### Veterans Military Service Connected Benefit Programs

Fullerton College is approved as a degree-granting institution for the attendance of veterans under Title 38, United States Code. This includes the programs covered in Chapters 30, 31, 32, 33, 35, 1606, 1607, and Harry

W. Colmery (Forever G.I. Bill). GI Bill is a registered trademark of the U.S. Department of Veterans Affairs (VA). The college is also approved for the attendance of California veterans’ dependents under the State Fee Waiver program. Veterans who plan to enroll in the college and need assistance with their education benefits are urged to contact the Veterans Resource Center (VRC).

### Veterans Academic Progress

A veteran student whose GPA falls below a 2.0 for one semester will be placed on Academic Probation. A veteran student is eligible to receive benefits until they are academically dismissed from the college. Please contact the Veterans Resource Center for more information.

### Transcripts

Veteran students must submit official transcripts (civilian) of all postsecondary coursework for evaluation. Military credit will be applied upon graduation only.

### Approved Majors and Transfer

Unless otherwise notified by SAA, all programs (majors) in this catalog are approved for the training of veteran students. Transfer programs are approved contingent upon Fullerton College having current articulation agreements with the universities offering the transfer programs. Students should meet with a counselor in the Veterans Resource Center or visit the Counseling Department's website for a list of Fullerton College's articulation agreements.

### Military Credit for PE and General Education Area E (Lifelong Learning and Self-Development) (Fullerton College AA/AS GE or CSU GE)

Students who wish to receive unit credits for prior military service are encouraged to contact the Veterans Resource Center. If the Veteran completed Basic Training Fullerton College will grant prior credit for the 1 unit PE Requirement for Graduation plus 3 units maximum for General Education (GE) in Fullerton College AA/AS GE Area E or California State University GE (CSU GE) Area E. – Lifelong Learning and Self-Development.

Veterans are still eligible to take additional PE coursework as desired; however, it may not be required for graduation and thus it may not be certified by the Veterans Resource Center nor paid for by the Department of Veterans Affairs (VA).

- **Veteran students cannot be certified if they become Academically Dismissed by the Admissions and Records Office (see Probation and Dismissal Policy (p. 58)).**

### Transferability of Courses

Community colleges, including Fullerton, offer curriculums paralleling the first two years of Bachelors degree programs as well as those preparing for employment at the completion of the

AA/AS degree. These categories are not mutually exclusive, however, as many courses included in occupational programs are also transferable to four-year colleges. For this and other reasons the definition of a transfer course is somewhat complicated.

First it needs to be said that each four-year institution decides for itself on the acceptance of courses from other colleges. In general, the policy,



whether liberal or restrictive, will apply equally to entrants from community colleges and from other four-year colleges with two exceptions. All four-year colleges impose a ceiling (between 60 and 70 units) on the acceptance of community college credit, and all recognize that community colleges offer remedial and vocational courses usually not intended for transfer.

In this context a community college course can be “transferable” in any one of the following ways:

1. As meeting lower-division requirements in the major. To be accepted for this purpose, the course must correspond almost exactly to the comparable course at the four-year college in content, prerequisites, and unit value.
2. As applying to general education requirements. Some four-year institutions are fairly flexible in accepting courses for this purpose, provided they are in the proper category; e.g. physical science, social science, fine arts. In many cases, however, the institution will accept only courses paralleling its own lower-division offerings. A special case here is the 39-unit block of general education which a community college certifies to the California State University System. In this case any course listed for this purpose by the community college will be accepted by any California State University as applicable to the 39-unit block, provided the applicable category (natural science, social science, humanities, basic subjects) has been completed and the student has requested general education certification on transcript request.
3. As elective credit. A course not acceptable as part of a major, support for the major, or as general education may be accepted as elective credit. This signifies that it will apply to the total-unit requirement for the Bachelors degree. Four-year institutions are generally liberal in accepting courses for elective credit, but almost certainly will exclude avowedly vocational courses or specialized courses which they do not offer.
4. For subject credit only. Acceptance of a course for subject credit only, without unit credit, usually takes place in one of the following situations:
  - a. The student has accumulated as many units as the four-year college will accept from a community college.
  - b. The corresponding course in the four-year college is upper-division.
  - c. The course is a prerequisite for a course in the student’s major, but the prerequisite is normally completed in high school.

In summary, then, the question of whether a course is transferable can be accurately answered only with reference to a particular four-year college and the purpose for which the course will be used. Checking the four-year college catalog in the Fullerton College Counseling Resource Center or the Cadena/Transfer Center as well as consultation with a counselor are recommended. A counselor can give you up-to-date information.

## Transfer Courses for the California State University

The campuses of the California State University system have agreed to accept, for the purposes of determining eligibility for upper-division transfer status, those courses classified by each community college as transferable. See “Announcement of Courses” section for transfer number and designation of course information.

It should be noted that acceptance of these courses by a CSU campus does not signify that they will necessarily be applied to the requirements

of a particular major or to general education requirements. Courses may be accepted as electives only toward the Bachelors degree. Students should consult a counselor for information on major requirements and the following pages for courses applicable to CSU and UC general education requirements.

## Updates to the Catalog

**NOTE: CHANGES WILL BE PUBLISHED AFTER CATALOG IS LAUNCHED ON AUGUST 12, 2021.**

**Effective August 2021 to July 2022:**

Listed below are updates to the 2021-2022 catalog. This includes new courses, course changes, corrections, and curriculum changes.

- New courses and course changes are the result of the Exceptions to the Catalog Review Cycle process.
- Corrections have been identified since the publication of the 2021-2022 catalog.
- Curriculum changes are the result of State approved received after publication.
- For updates to other information in the Catalog, please see the appropriate websites (e.g., Admissions & Records, Financial Aid, Student Services, etc.)

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