Fresno City College at a Glance

General Information
Fresno City College is a college of the State Center Community College District.
Address 1101 E. University Avenue
Fresno, California 93741
Web Address www.fresnocitycollege.edu

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 suggested will be strictly followed or fulfilled. The Board of Trustees and the administration of the State Center Community College District reserve 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.

The Fresno City College Catalog is prepared by the Office of Instruction and published by the Public Information Office.

Statement of Nondiscrimination
This institution does not discriminate on the basis of race, sex, sexual orientation, handicap, religion or age.

Accreditation
Fresno City College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules and policies change periodically and these changes may alter the information contained in this publication.

The Fresno City College 2018–2019 Catalog may also be viewed online at: www.fresnocitycollege.edu under Academics.

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(Area Code 559)

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Catalog Staff
Don Lopez ……………….. Vice President of Instruction
Cris Monahan Bremer …………. Director of Marketing and Communications
Kelli O’Rourke ………………. Curriculum Analyst
Mark Tabay and Randy Priester ….. Photography
Jaime Vang ……………….. Cover Design
Leah Unruh ……………….. Content Design
COLLEGE STATEMENT

This publication is intended to serve students and prospective students as a guide to program planning, institutional services and regulations for attendance at this institution. This catalog becomes effective with the Fall 2019 semester and ends with the Summer 2020 session, unless otherwise amended. The college reserves the right to adjust conditions of enrollment, class offerings, and services rendered as dictated by the limits of institutional resources and enrollment conditions.

Students are held individually responsible for the information contained in the catalog. Failure to read and comply with college regulations will not exempt students from whatever penalties they may incur.

Reference copies of the catalog are available in the Library, Counseling Center, Admissions and Records Office, online, and in the offices of the deans of instruction and educational advisors. Students are encouraged to purchase and use their own copy of the catalog. Personal copies are for sale in the Fresno City College Bookstore.
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Fresno City College is a college of the State Center Community College District, which operates within the broader mission of California’s 114 community colleges. Fresno City College strives to be a premier learning community whose students, graduates and staff will be among the best prepared citizens to meet the challenges of an increasingly complex environment.

**Fresno City College Mission**

As California’s first community college, Fresno City College provides quality, innovative educational programs and support services directed toward the enhancement of student success, lifelong learning and the economic, social, and cultural development of our students and region.

**Fresno City College Vision Statement**

As educational leaders in the community, Fresno City College faculty, staff and students will engage in a partnership to transform lives through education.

**Fresno City College Core Values**

- **Growth:** We are committed to sharing and exploring new ideas through collaboration, respect for diversity, promoting equity, and professional development.
- **Leadership:** We are leaders in our community, dedicated to behaving ethically, committed to open communication, and good stewards of our resources.
- **Success:** We champion excellence, quality, celebrating individual differences, and providing a positive and supportive environment for all.

**Fresno City College Ethics Statement**

The principles and values of the Fresno City College Code of Ethics and Excellence guide the faculty, students, and staff in the achievement of a profound appreciation of and respect for the dignity and worth of each member of our community of learners in responding to the trust conferred on the college by the public. We are guided by the standards and principles established by our respective professional associations and organizations in our effort to create an ethical college community.

- **Fairness:** In our relationships with each other, we will be fair and just in our decisions and actions by carefully weighing the circumstances in an equitable manner.
- **Civility:** We adhere to standard conventions of civility and regard of others. We achieve an open working and learning environment when each community member feels secure enough to participate in the free exchange of ideas. We ensure an honest and supportive climate which serves the interests of the institution and protects the well-being of all individuals.
- **Integrity:** In order to support excellence in learning, we will act in the college’s best interests. As a community dedicated to providing education, we demonstrate professional integrity and exemplary behavior in all that we do.
Respect: We demonstrate a high regard for the rights, diverse opinions, and life styles of all community members. It is our responsibility to establish a climate of mutual respect to protect the rights and freedoms of others.

Trust: The development of trust relies on our ability to treat others equitably in a non-exploitive manner.

Adapted from Humber College Ethics Statement.

Fresno City College Institutional Student Learning Outcomes

Communication
Students will demonstrate effective communication and comprehension skills.
- Comprehend, analyze and respond appropriately to oral, written and visual information.
- Effectively communicate information through speaking, writing and other appropriate modes of expression.

Critical Thinking and Information Competency
Students will demonstrate critical thinking skills in problem solving across disciplines and in daily life.
- Identify vital questions, problems, or issues and evaluate the reasonableness of a solution.
- Analyze, assess, and evaluate the validity of an argument.
- Analyze multiple representations of quantitative information, including graphic, formulaic, numeric, and verbal.
- Select and evaluate the accuracy, credibility, and relevance of information sources.

Community and Global Awareness and Responsibility
Students will demonstrate knowledge of social, cultural, environmental and aesthetic perspectives.
- Examine individual and group responsibilities in society.
- Participate in active citizenship.

Personal, Academic, and Career Development
Students will assess their own skills and abilities to develop personal, educational, and career goals, work independently and in group settings, and identify lifestyle choices that promote self-reliance, financial literacy, and physical, mental and social health.
- Assume personal responsibility for identifying academic and psychological-social needs, determining resources, and accessing appropriate services.
- Evaluate progress towards achieving personal goals, academic goals, career goals, and career resilience.

History of Fresno City College
Fresno City College was established in 1910, becoming California’s first community college and ultimately changing education in California.

The college’s history began in 1907 when C. L. McLane, then superintendent of schools for the city of Fresno, recognized the need for college instruction for San Joaquin Valley students. Largely through McLane’s efforts, Fresno Junior College was established. The first class consisted of 20 students and three instructors.

The campus was originally located at the former Fresno High School campus on “O” Street in downtown Fresno. In 1921, Fresno Junior College combined with the then Fresno normal School, later Fresno State College and currently California State University, Fresno. The junior college operated on the same campus as the four-year school. Fresno Junior College continued to grant associate degrees and offer a two-year curriculum, but its campus and staff were identical with those of the normal school. In 1948, new laws permitted local school districts to operate junior colleges, and Fresno City College returned to the “O” Street campus, which it shared with Fresno Technical High School. By 1950, the technical high school program had been phased out and the district began looking for another campus. The junior college district completed negotiations for the purchase of the University Avenue site from Fresno State College, and by 1956 Fresno Junior College had moved to its current location on University Avenue. The name was changed to Fresno City College on May 11, 1958.

Fresno City College has built upon its rich history and gone on to pioneer many new developments in community college education. Thousands of local people have worked through the years to make Fresno City College a viable and strong educational institution.
The District

The State Center Community College District office is located at 1525 E. Weldon, Fresno, CA 93704. The district is comprised of Fresno City College, Reedley College, Career and Technology Center, Clovis Community College, Madera Community College Center, Oakhurst Community College Center, and The Training Institute. Each campus offers certain programs/courses which are unique and are not offered at the other campuses.

Student Right-to-Know and Campus Security Act

In compliance with the Student-Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the State Center Community College District and Fresno City College to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2009, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students was tracked over a three-year period. Their completion and transfer rates are listed below. These rates do not represent the success rates of the entire student population at Fresno City College, nor do they account for student outcomes occurring after this three-year tracking period.

Based upon the cohort defined above, a Completer is a student who attained a certificate or degree or became ‘transfer-prepared’ during a three-year period, from Fall 2009 to Spring 2012. Students who have completed 60 transferable units with a GPA of 2.0 or better are considered ‘transfer-prepared’. Students who transferred to another post-secondary institution, prior to attaining a degree, certificate, or becoming ‘transfer-prepared’ during a five semester period, from Spring 2010 to Spring 2012, are transfer students.

- Completion Rate: 15.49%
- Transfer Rate: 10.84%

Annual reports of criminal activity on campus and procedures for prevention of campus crime, as required by the Crime Awareness and Campus Security Act of 1991, are available, on request, from the district Police Department.
## Academic Calendar

### Fall Semester 2019
- **August 12** ........................................Instruction begins
- **September 2** ..............................Labor Day Holiday (Campus Closed)
- **October 11** ............Last day to drop from 18-week classes
- **November 11** ..................Veterans Day Holiday (Campus Closed)
- **November 28-29** ..........Thanksgiving Day Holidays (Campus Closed)
- **December 9-13** ...............................Final examinations
- **December 13** ...........End of Fall Semester 2019
- **December 13** ........Last day for degree and certificate of achievement candidates to file application for December 2019 completion date
- **December 16-January 3** ..........Winter recess

### Spring Semester 2020
- **January 13** .....................................Instruction begins
- **January 20** .............................Martin Luther King, Jr. Day Holiday (Campus Closed)
- **February 14** ..........................Lincoln’s Day Holiday (Campus Closed)
- **February 17** ........................ Washington’s Day Holiday (Campus Closed)
- **March 13** ............Last day to drop from 18-week classes
- **March 13** .....................Last day for degree and certificate of achievement candidates to file application for May 2020 completion date
- **April 6-10** .................................Spring recess (Classes reconvene April 13)
- **May 18-22** ............................Final examinations
- **May 22** ..................End of Spring Semester 2020
- **May 22** ..................Graduation exercises

### Summer Semester 2020
- **May 25** ..............................Memorial Day Holiday (Campus Closed)
- **May 26** .............................Instruction begins for 4- and 10-week classes
- **June 8** ........................ Instruction begins for 8-week classes
- **June 19** ..........................Final examinations and end of 4-week classes
- **June 22** ........................ Instruction begins for 6-week classes
- **July 3** ........................ Independence Day Holiday Observed (Campus Closed)
- **July 31** ..........................Final examinations; end of 6-week, 8-week, & 10-week classes
- **July 31** ..........................Last day for degree and certificate of achievement candidates to file application for August 2020 completion date

**Note:** Evening classes observe the same holiday and examination schedule as day classes.
ADMISSION AND REGISTRATION

Admission of Students

Fresno City College is one of multiple colleges and centers within the State Center Community College District (SCCCD). Students need only submit one application for admission to any of the SCCCDS colleges/centers. Apply online at www.fresnocitycollege.edu for greatest convenience. Applications are also available from the Admissions and Records office at any college or center.

Who Needs to Apply?

If you have never attended (first-time college or transfer student) a college or center within the State Center Community College District (SCCCD); if you previously attended (returning student) a college or center within SCCC and have been away for two or more consecutive primary semesters (fall to spring or spring to fall); if you are a high school graduate and previously attended as a high school student (enrichment or dual enrollment); you must complete the SCCC online admissions application.

High school students who wish to enroll in college courses before graduating high school, must complete a SCCC online Enrichment/Dual Enrollment admissions application as well as the required Enrichment or Dual Enrollment program packet for the campus or center the student would like to attend.

General Admission

Any person who is at least 18 years of age, with a high school diploma or equivalent (such as California High School Proficiency Examination (CHSPE) or the General Education Development test (GED) with a score of at least 45 overall and with no subtest lower than 35) may be admitted. An official transcript or test result must be submitted to the Admissions and Records Office, 1101 East University Avenue, Fresno, CA 93741-0001.

High School Enrichment/Dual Enrollment Admission

High school students who wish to enroll in college courses before graduating high school, must complete a SCCC online Enrichment/Dual Enrollment admissions application as well as the required Enrichment or Dual Enrollment program packet for the campus or center the student would like to attend.

International Admission

A person must be 18 years of age or older and a high school/secondary school graduate before the start of the admission semester. Upon completion of the SCCC admission application, official documents (i.e. evidence of financial responsibility, English proficiency, and applicable health/TB records), and proof of high school graduation with detailed secondary and post-secondary transcripts of record are to be submitted with English translation to the International Student Program Office for admission consideration no later than:

• May 1 for Fall admission
• October 1 for Spring admission

International students admitted by FCC must comply with the regulations of the Student and Exchange Visitor Program (SEVP) and maintain 12 qualifying units or more each semester at Fresno City College. Studies are in person (face to face), with minimal online classes allowed under SEVP. Students may study for an Associate Degree, Degree for Transfer, or Certificate Program. Students must purchase the mandatory health insurance plan endorsed by the FCC college district. Current admission application forms and procedures, and relevant health and TB requirements are available on the FCC website.

An applicant is not officially admitted to the college until written notification (Form 1-20, Certificate of Eligibility for Nonimmigrant Student Status) is provided by the FCC International Student Program. By the student’s FCC program start date, they must provide a copy of their F1 Visa. A copy of the visa and current passport must be kept in the student’s International Student Program file at all times.

Concurrent enrollment is also allowed on a part-time basis by F1 students from another international program. Specific rules apply and may be obtained from the Program office.

2019-2020 Fresno City College Catalog
Returning Student Admission
A person who previously attended any college or center within SCCCD and has been absent for two or more primary consecutive (fall and spring) semesters must complete an admission application for the semester they are planning to return. An official transcript of work taken at other institutions (including summer session and extension or online courses) since the date of last enrollment at Fresno City College must be sent to the Admissions and Records Office, 1101 East University Avenue, Fresno, CA 93741-0001.

Transfer Admission
For a person who has previously attended another college, not within SCCCD, a complete transcript of work attempted from each college of attendance, whether or not credit was earned, is to be sent directly to Fresno City College Admissions and Records office. It is important to note that transcripts received with “work in progress” are not considered complete.

Summary of Admission Requirements
Any person who intends to obtain a degree or certificate of achievement at Fresno City College or plans to transfer to a four-year college or university shall be required to:
- Complete a SCCCD Admission Application prior to the deadline as specified in the catalog, if applicable.
- If no other college work has been completed, provide official High School transcripts, GED scores or copy of the CHSPE Certificate to the Admissions & Records office.
- Request each college of attendance to send a complete official transcript of work attempted whether or not credit was earned.
- Transcripts should be sent directly to: Fresno City College Admissions and Records 1101 E University Avenue Fresno, CA 93741-0001

Residency
By law, every student must file a statement declaring their residence status. The form for such a statement is included in the admission process. A maintenance allowance is available for students attending Fresno City College whose permanent residence is in a California nondistrict territory (district without a community college) and who live more than 60 miles from the “nearest community college attendance center.” For further information, contact the Admissions & Records Office, room 111, Student Services Building, lower level. (California Education Code 76160 Rev. 83).

Exemption from Nonresident Tuition (AB-540)
Any student, other than one with United States Citizenship and Immigration Services (USCIS) nonimmigrant visa status (see exception below for students who have been granted T or U visa status), who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the University of California, and the California State University (all public colleges and universities in California). A student is exempt from paying nonresident tuition if the student meets all of the following four requirements:
1. The student must have:
   - attended a combination of California high school, adult school, and California Community College for the equivalent of three or more years; or
   - 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 and/or high schools in California for a total of three or more years, and
2. The student must have:
   - graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam), or
   - completed an associate degree from a California Community College, or
   - completed the minimum requirements at a California Community College for transfer to the California State University or the University of California, and
3. The student must register as an entering student at, or current enrollment at, an accredited institution of higher education in California, and

4. The student must file an affidavit with the college or university stating that if the student is a non-citizen without current or valid immigration status, the student has filed an application to legalize immigration status, or will file an application as soon as the student is eligible to do so.
   - Students who are nonimmigrants 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.
   - Students who are nonimmigrants, other than those with T or U visa status as noted above, (for example, those who hold F (student) visas, B (visitor) visas, etc.) are not eligible for this exemption.
   - The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.
   - Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.

Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be "nonresidents."

Reclassification

A student previously classified as a nonresident may request reclassification by completing a Residency Questionnaire available at the Admissions and Records Office. The request for reclassification must be submitted prior to the semester for which reclassification is to be effective. Extenuating circumstances may be considered in cases where a student failed to petition for reclassification prior to the residency determination date. In no case, however, may a student receive a nonresident tuition refund after two primary terms.

Written documentation, evidence of both physical presence and intent, is required of the student in support of the residence reclassification.

A student shall be considered financially independent for purposes of residence reclassification if the applicant meets all of the following requirements:
   - Has not and will not be claimed as an exemption for state and federal tax purposes by his or her parent in the calendar year prior to the year the reclassification application is made;
   - Has not lived and will not live for more than six weeks in the home of his or her parent during the calendar year the reclassification application is made.

A student who has established financial independence may be reclassified as a resident if the student has met the requirements of Title 5 Sections 54020, 54022 and 54024.

Determination of financial independence is not required for students who were classified as nonresidents by the University of California, the California State University, or another community college district. (Education Code Section 68044)

The Admissions and Records Office will make a determination based on the evidence and notify the student no later than 14 days after receipt of the request for reclassification. Students have the right to appeal according to the procedures below.

Appeal Procedure

The appeal is to be submitted to the Fresno City College Admissions and Records Office which must forward the appeal to the Vice President of Student Services within five working days of receipt. Copies of the original application for admission, the residency questionnaire, and evidence or documentation provided by the student, with a cover statement indicating upon what basis the residence classification decision was made, must be forwarded with the appeal.

The Vice President of Student Services shall review all the records and have the right to request additional information from either the student or the Admissions and Records Office. Within 30 calendar days of receipt, the Vice President of Student Services shall send a written determination to the student. The determination shall state specific facts on which the appeal decision was made.

Matriculation

Fresno City College strives to make students aware of the varied educational programs and services that are offered and to provide smooth access to these programs and services. Once enrolled, the college provides many services to ensure success.

All new first-time college students may choose to matriculate. Matriculation is the process that brings Fresno City College and each student together for the purpose of helping students succeed in achieving their educational goals. To accomplish this, the college and the student form a partnership in which each have responsibility for student success.
As a partner in the success of students, and in alignment with the campus matriculation services, the college will provide the following:

- An admission process
- An assessment of basic educational skills and career goals
- Orientation to college programs, services and procedures
- Counseling to develop a Student Educational Plan
- Counseling related to student progress with referral to support services as necessary

As a partner in their success, students agree to:

- Complete the placement assessment process
- Declare a specific educational objective
- Participate in an orientation session
- Participate in counseling-related activities to develop and refine a Student Educational Plan

Orientation

New students are required to participate in orientation. Students may be exempt from orientation for any of the following reasons; however, this exemption will not be used to meet the matriculation requirements for enrollment priority:

- Attended another college/university
- Completed an associate degree or higher
- Pursuing certain educational goals (contact the Counseling Department for details)

Advising

It is recommended that students meet with an academic advisor each semester. Students may obtain counseling assistance by contacting the Counseling Center by calling (559) 442-8226, or online counseling is also available via the Fresno City College website at www.fresnocitycollege.edu.

Assessment

It is highly recommended that students planning to take an English class, a math class or a class that has an English or math prerequisite, meet with a counselor prior to registration to ensure they enroll in classes of the appropriate level.

A schedule of testing times and dates is established each month. For test dates, times, and location look online at: www.fresnocitycollege.edu/index.aspx?page=2402 or call the Assessment Center hotline at (559) 442-8280.

If a student wishes to take a class other than the one recommended by the assessment process, the student may discuss this with the counselor. If he or she agrees, the counselor will approve the student's entry into that class. If the counselor does not agree, the student may appeal the counselor's recommendations to the Dean of Counseling and Guidance by completing the Prerequisite/Corequisite Challenge Petition (available from the Counseling Department or from a counselor). The student will have a chance to present their case to the Dean at which time a decision will be made as to whether to enroll in the class.

Students who are unsure of their academic or vocational goals are encouraged to:

1. Go to the Career & Employment Center for assistance with career planning. This center offers a series of assessments that include: True Colors personality exploration
   - DISCOVER interest, ability and values inventories
   - EUREKA Micro Skills
   - Strong Interest Inventory
   - Meyers-Briggs Type Indicator
2. See a counselor.
3. Take Counseling 48, Career Planning course.

Students who wish to be a candidate for graduation in two years must carry an average of 15 units per semester.
Registration

Upon completion of the applicable admission requirements, specific registration instructions are emailed to the student’s SCCCD (my.scccd.edu) email account. Registration instructions are sent beginning in March for the summer/fall semester and in October for the spring semester.

Effective for Summer/Fall 2014 registration, SCCCD established Registration and Enrollment procedures in accordance with Title 5, Section 58108. Assignment of registration dates is determined based upon the following Tier requirements.

<table>
<thead>
<tr>
<th>TIER</th>
<th>PRIORITY GROUP</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>*CVP with Reedley or Clovis majors – may register for Spring 2019</td>
<td>• Fully Matriculate - CVP: fully matriculated by published deadline</td>
</tr>
<tr>
<td></td>
<td>Spring classes at CCC and RC sites only</td>
<td>• Good Academic Standing (not req. for Foster Youth or homeless)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Do not Exceed 90 SCCCD degree applicable units</td>
</tr>
<tr>
<td>1b</td>
<td>Active Military/Veterans, CalWORKs, Disabled Student Programs and Services</td>
<td>• Fully Matriculate - CVP: fully matriculated by published deadline</td>
</tr>
<tr>
<td></td>
<td>(DSPS), Foster Youth, Extended Opportunity Programs and Services (EOPS),</td>
<td>• Good Academic Standing (not req. for Foster Youth or homeless)</td>
</tr>
<tr>
<td></td>
<td>verified homeless, Tribal TANF, and Central Valley Promise (CVP)*.</td>
<td>• Do not Exceed 90 SCCCD degree applicable units</td>
</tr>
<tr>
<td>2</td>
<td>District approved groups based upon AR 5055: ASG, Athletics, DSPS Note</td>
<td>• Good Academic Standing</td>
</tr>
<tr>
<td></td>
<td>takers, Future Nurses, Honors, Middle College High Schools, ROTC, TRIO,</td>
<td>• Continuing students must have an SEP by published deadline</td>
</tr>
<tr>
<td></td>
<td>Student Ambassadors</td>
<td>• Do not exceed 90 SCCCD degree applicable units</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• First-time college students MUST be fully matriculated</td>
</tr>
<tr>
<td>3</td>
<td>Continuing students who have completed a Student Education Plan (SEP)*.</td>
<td>• Good Academic Standing</td>
</tr>
<tr>
<td></td>
<td>Based upon Quality Points</td>
<td>• Continuing students must have an SEP by published deadline</td>
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<tr>
<td></td>
<td></td>
<td>• Do not exceed 90 SCCCD degree applicable units</td>
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<tr>
<td></td>
<td></td>
<td>• First-time college students MUST be fully matriculated</td>
</tr>
<tr>
<td>4a</td>
<td>First-time college students – from SCCCD feeder High Schools</td>
<td>• Fully Matriculated by published deadline</td>
</tr>
<tr>
<td>4b</td>
<td>First-time college students – non-feeder high schools</td>
<td>• Fully Matriculated by published deadline</td>
</tr>
<tr>
<td>4c</td>
<td>First-time college students – Home Schooled within the SCCCD service area</td>
<td>• Fully Matriculated by published deadline</td>
</tr>
<tr>
<td>5</td>
<td>Continuing students <strong>without</strong> a Student Education Plan (SEP). Based upon</td>
<td>• Good Academic Standing</td>
</tr>
<tr>
<td></td>
<td>Quality Points</td>
<td>• Do not exceed 90 SCCCD degree applicable units</td>
</tr>
<tr>
<td>6a</td>
<td>First-time college students who are not fully matriculated, College</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Advancement Program</td>
<td></td>
</tr>
<tr>
<td>6b</td>
<td>Returning students with a Student Education Plan (SEP)</td>
<td>• SEP on file by published deadline</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Good Academic Standing</td>
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<tr>
<td></td>
<td></td>
<td>• Do not exceed 90 SCCCD degree applicable units</td>
</tr>
<tr>
<td>6c</td>
<td>Returning students <strong>without</strong> a Student Education Plan (SEP) and transfer</td>
<td>• Good Academic Standing</td>
</tr>
<tr>
<td></td>
<td>students</td>
<td>• Do not exceed 90 SCCCD degree applicable units</td>
</tr>
<tr>
<td>7</td>
<td>All not meeting criteria above may register during any open enrollment.</td>
<td>• Not good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Over 90 SCCCD degree applicable units</td>
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<tr>
<td></td>
<td></td>
<td>• High School Enrichment</td>
</tr>
</tbody>
</table>
Definitions

First-time students: Students who are attending college for the first time, excluding high school enrichment students.

Continuing students: Students who are continuously enrolled from one primary (fall or spring) term to the next.

Returning students: Students who previously attended that stopped out for at least one primary (fall or spring) term.

Good Academic Standing: A student who is not on academic or progress probation, or whose most recent term was successful, is in Good standing for enrollment priority only.

Academic Probation: after attempting 12 units, student's cumulative GPA falls below 2.0.

Progress Probation: after attempting 12 units, student does not complete more than 50% of units attempted.

SEP: Student Educational Plan. The plan outlines suggested courses for students based on degree, certificate, or transfer plans.

*SEPC: Comprehensive Student Education Plan. Students who complete an SEPC may have their registration date advanced by 1 day within the student's current tier.

Fully Matriculated: Students who complete the college orientation, assessment/placement test, and student educational plan.

90 Degree Applicable Units: Based on units earned at SCCCD. Excludes units earned from basic skills and special courses.

Class Schedule Change

Errors in registration should be rectified prior to the start of each semester or session. Students are encouraged to discuss with their counselors program changes that affect the educational plans.

Concurrent College Enrollment

Fresno City College students planning to attend another college (other than Clovis Community College, Reedley College or the Madera and Oakhurst centers) at the same time are required to obtain a concurrent enrollment authorization form from the college where the major number of units will be taken. Forms are available at the Admissions and Records Office, Student Services Building, lower level, for students who will be taking the majority of units at Fresno City College. Students may attend multiple sites concurrently within SCCCD without following the procedure described above.

Dropping (Withdrawal from) a class or Withdrawing from College

A student assumes the responsibility of meeting class standards of attendance and progress. This obligation remains until such time as the course is officially dropped. It is the student's responsibility to drop a class in which he/she no longer wishes to be enrolled. A student may drop (withdraw) from a full-term class through the last day of the ninth week of instruction (or 50 percent of a short-term class, whichever is less).

There will be no entry on a student's record for dropping during the first three weeks of a full-term class or prior to the 20 percent point of a short-term class.

An entry of “W” will be recorded on the student's record beginning at the 20 percent point of a class through the 50 percent point of a class.

A student may drop (withdraw) from all of their classes through the last day of the ninth week for full-term classes or the 50 percent point of short-term classes.

A student may drop him/herself using WebAdvisor, provided there are no monetary holds and the student is in GOOD standing, or in person at any college or center Admissions and Records office, or can request to be dropped (withdrawn) by mailing or faxing a signed letter to the college. The letter must be received by the Admissions and Records office prior to the final drop date of the semester. The mailing address and fax number are available at http://www.fresnocitycollege.edu/admissions-aid/admissions-and-records-office/index.html

Excessive “Ws” will be used as factor in progress probation and dismissal procedures.

Holds on Records and Registration

Students whose records are held for monetary reasons shall not be allowed to (1) register for classes; (2) send or receive transcripts; (3) receive other documents which relate to their records, including final grades or enrollment certification at any campus within SCCCD.

A monetary hold is placed on a student's record when the student fails to pay debts (e.g., failure to pay fees, insufficient fund check, financial aid repayment, loans) or return property owned by any college or center (e.g., library books, gym equipment, calculators) in the district. Additionally, holds may be placed for academic or disciplinary reason which will result in the student's inability to register for subsequent classes.

When students have cleared their financial obligations, the "monetary hold" will be removed.
Intra-District Transfer
Fresno City College students who plan on attending or transferring to a college or center within SCCCD for the ensuing semester will receive the same registration service and priority as currently enrolled students. It is advised that any cross enrolled or transfer student see a counselor.

Registration Substitutes (Proxy Registration)
The Family Education Rights and Privacy Act (FERPA) makes it illegal for the college to release a student's confidential educational records to anyone without express written permission of the student. If the student is unable to register at their appointed date and time, a substitute may be appointed provided the proper procedure is observed; contact the Admissions and Records office for the specific procedure to follow.

Wait List Rules and Information
When unable to find an open section of a course, students may have the option of being placed on a "WAIT LIST" for a specific section of the course. Please note that the following rules apply:

1. Students may add their name to any available "WAIT LIST" up to the last day of registration prior to the beginning of the class. Not all classes have wait lists.
2. Students will be added to a "WAIT LIST" on a first-come, first-serve basis.
3. Students cannot be placed on a "WAIT LIST" prior to their registration appointment date.
4. Students on a "WAIT LIST" will have first priority for any seats in a "full" class that may subsequently become available during the first 20% of the course PROVIDED that they attend each and every class meeting (for 18-week semester courses, this is the first 3 weeks of class).
5. A "WAIT LIST" will be available only for current class sections that are "full" (that is, the class has reached its "maximum class size"). No "WAIT LISTS" will be available for "canceled" class sections or class sections that are not yet "full". Not all classes have wait lists.
6. Students cannot be placed on a "WAIT LIST" for a section of a course when already enrolled in another section of that same course.
7. Students should not be on more than one "WAIT LIST" for the same course.
8. The Admissions and Records Office will regularly monitor all classes with existing "WAIT LISTS" up to the start of the semester. When an open seat becomes available, the top eligible student on the wait list will receive "Permission" to register and be sent a notification to their student (my.scccd.edu) email. The student must act upon this notification before the expiration date of the permission to register. Failure to act before the expiration date will result in the student being removed from the waitlist.
9. On the first day of class, instructors will determine the number of openings available in the class, and then offer spaces to students who are on the "WAIT LIST" (providing they are present in the class) in the order in which their names appear on the list. Student is responsible for officially adding the class within published registration dates.
10. After the "WAIT LIST" for the class is exhausted, additional openings, if any, will be filled by the instructor in accordance with existing college and district policy.
11. Any and all other registration rules (conflicts, overload, administrative or student holds) may prevent the student from enrolling in a class. See Schedule of Classes for details or visit www.scccd.edu/waitlist.

Student Fees

Enrollment Fee*
The state of California mandates an enrollment fee of $46 per unit (with no cap) be charged to all students (E.C. 76300; 5, CCR 58500-58509). Classes may be dropped if fees are not paid by due dates. Please see the Class Schedule for fee deadlines and payment options.

Nonresident and International Tuition
Nonresident and international students are charged a tuition fee as follows (education Codes 76140; 76140.5):

<table>
<thead>
<tr>
<th>Regular and Summer Sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each full unit taken:</td>
</tr>
<tr>
<td>- International Student Tuition: $265**</td>
</tr>
<tr>
<td>- Nonresident Student Tuition: $265**</td>
</tr>
<tr>
<td>- Plus enrollment Fee per unit: $46**</td>
</tr>
</tbody>
</table>

** Note: Nonresident fees are computed each year in accordance with a state mandated formula and are therefore subject to change. Contact the College Business Office for current information. *Fees are subject to change without notice.
A “nonresident” student is a student who has not resided in the state for more than one year immediately preceding the first day of the regular semester/summer session (Title 5, Section 54002), and has not demonstrated evidence of intent to be a California resident.

All international students must also have proof of domestic health insurance coverage in the amount prescribed by Board policy (which includes repatriation). Contact the International Student Program Office, Student Services Building, room 108.

Community college nonresident fees are due and payable to the College Business Office prior to completion of registration. Nonresident fees are payable via money order, certified check, cash or credit card.

Authorized apprenticeship students are exempt from Nonresident tuition fees for apprenticeship courses only.

**Instructional Materials Fees**

In accordance with Education Codes (E.C. 73365, 81457, 81458, SCC 59400-59408), Fresno City College may require students to provide materials that are course-related, including, but not limited to, textbooks, tools, equipment and clothing. Such materials will be required if:

1. The instructional or other materials are used in the production of a course-related project or “end product” that has continuing value to the student outside of the classroom setting; or
2. The instructional and other materials required for the class have a continuing value to the student outside of the classroom setting.

**Health Fee**

All on-campus students are required to pay a $20 health fee for each semester (fall and spring terms) and a $17 health fee for the summer session. Off-campus students are required to pay a $12 health fee for each term (fall, spring and summer). For students enrolled in both on-campus and off-campus sites the health fee is charged at the on-campus rate. Effective Fall 2006, on-campus sites will include Fresno City College, Reedley College, Clovis Community College, and Madera Community College Center. (E.C. 76355)

**Parking Fee**

Student vehicles must display a State Center Community College District parking permit to park in campus parking lots. Parking permits may be purchased at the FCC Bookstore or the College Business Office. The fee for parking on approved parking facilities is $30 per semester; summer semester is $20. One-day permits may be purchased at walk- and drive-up dispensers and metered parking is also available. Enforcement for parking permits will begin the first day of class. Students requiring handicap parking should contact the Disabled Students Programs and Services Office.

**Transcript Fee**

Requests for transcripts of courses taken at Fresno City College or within the State Center Community College District must, by provision of State and Federal law, be accompanied by the written signature of the student. Students are entitled to obtain two copies of their transcript free of charge; each additional copy is $5. Payment must be received before the request will be processed. Transcripts will not be provided if the student has a “hold” on their permanent file (E.C. 76233).

Normally, transcripts are available within five working days except during periods which involve holidays or at the end of each semester. When requesting transcripts by mail, address the request to the Admissions and Records Office. Transcripts from other institutions become a part of the student’s permanent file and are not duplicated and forwarded with the Fresno City College transcript.

**Associated Student Government Representation Fee**

A Student Representation Fee of $1 per student per semester (excluding summer session) has been established by an election at Fresno City College in the Fall of 2001. Under the provision of California Education Code, section 76060.5 and California Administrative Code sections 54801-54805, the students established the representation fee by a two-thirds majority of students voting in the election.

Use of Student Representation Fee

The money collected from the student fee shall be used for student advocacy at the local, state, and national levels.

**Right to Request a Waiver**

Students have the right to request a waiver of the Student Representation Fee for religious, political, moral, or financial reasons. However, no refunds will be given once the fee is paid.
To request a waiver, the student must fill out a form available at Fresno City College in the Student Activities, or College Business Offices or online at the College Business Office main webpage. At Reedley College, Clovis Community College, Madera and Oakhurst Community College Centers, the forms are available in the College Business Office.

For more information, contact the Associated Student Government Office at (559) 442-8275.

Credit by Examination Fee*

Students are required to pay a fee in the amount of $10.00* for the first unit plus $5.00* for each additional unit for each course challenged. This fee is specific to the Credit by Examination charge. An additional $46.00 per unit fee is required by State Law (E.C. 76300; 5, CCR 58753).

Those students otherwise required to pay nonresident fees will also be required to pay the nonresident unit fee for each unit of a course challenged in addition to the specific Credit by Examination fees noted in the above paragraph.

Refund to Students

Refund or Reversal of Enrollment Fees and Tuition

Refund or reversal of enrollment fees and tuition shall be made following cancellation or withdrawal from class(es) in accordance with the following schedule.

Refunds shall be initiated upon receipt of a written request to the Business Office. Requests may also be made online at Fresno City College admissions website business-office/fee-reversals-and-refunds.html. Refund requests are subject to an audit of the student’s record to verify balance. Credit balances may be carried forward to the new term in lieu of a refund. Balances greater than or equal to $15 will remain on the account for three years and amounts less than $15 will remain on the account for one year.

Primary Term-Length (Full Semester)
Classes, 18 Weeks

- Withdrawal during the first two weeks of the semester ................................................................. 100% refund
- Withdrawal after the second week of the semester ............................................................................ no refund

Summer/Short-Term Classes

State code defines the drop deadlines to qualify for fee refund/reversals of enrollment fees for short-term classes as on or before 10 percent of the duration of the class.

Refund of Health Fee

Students receive a refund upon complete withdrawal from all classes in accordance with the enrollment and tuition fee refund schedule.

Refund of Parking Fee

Full refunds for parking permits will be made during the first two weeks of the fall/spring semesters and the first week of the summer sessions upon proof of complete withdrawal from school. The parking permits must be attached to a Request for Refund form and returned to the College Business Office in order to obtain the refund. There is no refund for limited-term parking permits.

Refund of Associated Student Body Membership

A refund policy for Associated Student Body membership has been adopted by the students. This policy provides for full refund during the first week of classes and one-half refund during the second week. No refunds will be made after the second week.
Units of Academic Credit

The standard quantity for measurement of college work is a unit. One unit generally equals one hour of classroom lecture per week plus two hours of study. Using this formula, a class that meets in lecture three times a week for one hour will be worth three units. This college operates on the semester system and all references to units of academic credit in this catalog are to semester units. Quarter units from other colleges may be converted to semester units by decreasing the number of quarter units by one-third.

Full-Time Enrollment

The normal semester load is 15 units. Students enrolled in 12 or more units are considered full-time students. Students with regular admission status who are not on academic probation may take as many as 18 units. Students on academic probation are normally limited to 12 units.

Permission to enroll in excess of 18 units is granted only when unusually high scholarship and urgent need prevail. Counselors can approve a student request to take 19 to 21 units. Students who wish to take 22 or more units may obtain a petition for this purpose in the Counseling Center.

The student who desires to be a candidate for graduation in two years must carry an average of 15 units per semester. The following classifications have been established:

- Freshman .......... fewer than 30 units completed
- Sophomore .......... 30 or more units completed

Students who work are urged to be realistic in balancing the number of academic units undertaken in view of outside hours of work. Normally, each unit undertaken requires two hours of outside study for each hour of class lecture.

Summer Units Allowed

All students are limited to 18 units in all summer sessions, with no more than 8 units allowed in a four-week session. Disqualified students and students on probation are required to have a counselor's approval before registering for any summer session(s). Disqualified students and students on probation who have obtained a counselor's approval to register for any summer session(s) must also have a counselor's approval before adding any class(es) in any summer session(s).

Non-Credit Classes

Non-credit classes are classes in which the student receives neither units nor a grade; however, at the completion of the course the registrar will record on the transcript that such a course was completed.

Students will be governed by the same attendance policies and responsibilities as those students taking credit classes. (A student may not attend a class without enrolling.)

Note: Credit status is required for pursuit of Associate Degrees and Certificates of Achievement.

Distance Education

Courses offered at FCC through Distance Education (DE) represent the high quality standards that FCC is committed to in all of its course offerings. Some courses can be taken fully online, where no face to face meetings are required while other courses are offered in a hybrid format, requiring one or more on campus class meetings. Almost all other curriculum that is neither fully online or hybrid is web-enhanced at FCC, meaning that internet based resources are used by students for homework and/or research. In all offerings, FCC is committed to high quality standards that offer our students the unique flexibility needed to achieve their academic goals.

Regular internet and access to a computer are required for students to gain access to course materials 24/7. Online and hybrid classes are not self-paced. Students should visit the “Quest for Success” materials on the FCC website prior to enrollment. In addition, all students who enroll in an online or hybrid course have student readiness modules sent to them in order to evaluate their readiness for online and/or hybrid courses.

For more information see our website — http://www.fresnocitycollege.edu/academics/online-learning/index.html
Attendance

Students will be dropped from class if they fail to attend the first class session of the semester. There are no institutionally approved excused absences for any reason. Only your instructor may excuse an absence. Absences caused by personal engagements, transportation delays and business affairs will not be excused, nor will absences from class to complete registration or add/drop activities.

Students are expected to be in the classroom at the time the class begins. Instructors are required to take attendance at each class session and unless there are extenuating circumstances, the student who is absent for two successive weeks of instruction may be dropped from class if absences are within the 50 percent drop deadline (50 percent of the class term). Lack of regular attendance after the 50 percent drop deadline may result in an unsatisfactory grade.

Once dropped, should a student believe there is just cause for reinstatement, the student may petition through the office of Admissions and Records. Reinstatement is at the discretion of the faculty member.

Illness

Students who have a communicable disease or any illness or injury which will cause an absence of one week or more may notify the Health Services office. In these circumstances, the Health Services office will transmit messages to instructors. Students may call the Health Services office at (559) 442-8268.

The Health Services office may exclude any student from campus who is infected with any contagious or infectious disease (Title 5, California Code §48211 and 48212).

The student will be permitted to return when school authorities are satisfied that any contagious disease does not exist (Education Code §49451).

Makeup Work

Makeup work, if allowed by instructor, must be completed to the satisfaction of the instructor of the course. Being excused from class does not relieve the student from the responsibility for completing all assignments.

Final Examinations

Class examinations on a semester’s work are given at the close of each semester. Failure to attend the examination may result in a grade of “F” for the examination. Arrangements for emergencies may be made with approval of the individual instructor and the dean of the appropriate division.

Grading System

Grades are earned in each course and are recorded on students’ permanent records. Grades represent the evaluation of student achievement of course objectives and learning outcomes. The college uses a five-letter grading system. A, B, C, and P are passing grades, satisfactory or better. D is a passing but less than satisfactory grade. F is a failing grade. NP is a less than satisfactory or failing grade; it is not a passing grade. Units of credit are earned for all passing grades (A, B, C, and D). Grade symbols are defined and grade points are earned for units of credit as follows:

<table>
<thead>
<tr>
<th>EVALUATIVE GRADE SYMBOLS</th>
<th>MEANING</th>
<th>GRADE POINTS PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.0</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2.0</td>
</tr>
<tr>
<td>*D</td>
<td>Passing, less than satisfactory</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0.0</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
<td>0.0 (A passing grade, satisfactory or better)</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass</td>
<td>0.0 (Not a passing grade, less than satisfactory or failing)</td>
</tr>
<tr>
<td>Y</td>
<td>Completion of non-credit course</td>
<td>0.0</td>
</tr>
<tr>
<td>N</td>
<td>Non Completion of non-credit course</td>
<td>0.0</td>
</tr>
</tbody>
</table>

* The “D” grade is passing but is not considered satisfactory for meeting the graduation requirements in Math, Reading, Writing, Communication, and Computer Literacy. In addition, the “D” grade is passing but is not considered satisfactory for meeting many of the college degree, major, or course prerequisite requirements. Also, the “D” grade may not satisfy transfer requirements to four-year institutions.

In addition to the evaluative symbols listed above, non-evaluative symbols may be assigned to students’ permanent records in specified conditions. No units of credit are earned for courses to which these non-evaluative symbols are assigned. The non-evaluative symbols are defined as follows:
Academic Regulations

<table>
<thead>
<tr>
<th>NON-EVALUATIVE SYMBOLS</th>
<th>MEANING</th>
<th>GRADE POINTS PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0.0</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>0.0</td>
</tr>
<tr>
<td>EW</td>
<td>Withdrawal for Extenuating Circumstances</td>
<td>0.0</td>
</tr>
<tr>
<td>MW</td>
<td>Military Withdrawal</td>
<td>0.0</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
<td>0.0</td>
</tr>
<tr>
<td>RD</td>
<td>Report Delayed</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**W, Withdrawal**

Withdrawal from a course or courses shall be authorized through the last day of the ninth week of instruction (or 50 percent of the course, whichever is less). The *W* will not be used in calculating a student’s grade point average, but it will be used as a factor in progress probation and dismissal procedures. A student who remains in a course beyond the withdrawal deadline must be assigned an evaluative or non-evaluative symbol other than *W*.

**EW, Excused Withdrawal**

An "EW" symbol is recorded upon approval of a Petition to Withdraw Under Extenuating Circumstances.

**MW, Military Withdrawal**

The military withdrawal symbol is authorized any time a student, who is a member of an active or reserve United States military service, receives orders compelling a withdrawal from courses. The *MW* symbol is assigned by the registrar upon verification of such orders. Military withdrawals shall not be counted in progress probation and dismissal procedures.

**IP, In Progress**

*IP* is assigned only in a course which extends beyond the normal end of an academic term. It indicates that course work is in progress and an evaluative grade symbol will be assigned when that work is completed. The *IP* is assigned to a student’s permanent record to satisfy enrollment documentation, and the appropriate evaluative grade symbol will be assigned and appear on the student’s permanent record for the term in which the course is completed.

**RD, Report Delayed**

The *RD* symbol may be assigned only by the registrar and is 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.

I, Incomplete

The *I, Incomplete*, symbol may be assigned in a course only by approval of the course instructor if all of the following conditions are met:

- The student has completed all but the final examination or other minimal amount of course work required for a final semester grade.
- The student has a serious and verifiable reason for not completing the required course work.
- The student has a passing grade in the course at the time the incomplete, *I*, grade is assigned.
- The student requires no additional class time for completion of the course.

In assigning an incomplete, *I*, grade, an instructor will specify, on the appropriate grade report form, a list of conditions necessary for the removal of the incomplete grade, the time period allotted to the student to satisfy these conditions, and the evaluative grade symbol to be assigned if the listed conditions are not satisfied within the allotted time period.

An incomplete, *I*, grade will not affect the academic status of a student, but it will affect the progress status. An incomplete, *I*, grade must be replaced by the appropriate evaluative grade symbol no later than one full semester after it has been assigned (excluding summer), though an earlier limit may be specified by the course instructor. Students may not re-enroll in a course for which they have received an incomplete, *I*, grade during the time that the incomplete, *I*, grade is in effect.
Most college courses allow students the option of a final course grade of P, Pass, or NP, No Pass, instead of traditional letter grades (A, B, C, D, or F). Some courses are graded only on a Pass/No Pass basis. In courses graded only on the Pass/No Pass basis or when a student elects this grading option, the grade of P, Pass, will be assigned if the student has passed the course with a grade equivalent of A, B, or C, and credit will be awarded for the unit value of the course. The grade of NP, No Pass, will be assigned if the student earns the grade equivalent of D or F, and no units of credit will be awarded for the course. Neither the P, Pass, grade nor the NP, No Pass grade is included in the calculation of the grade point average at this institution.

A maximum of 15 units of credit may be earned on a Pass/No Pass grading basis in degree-applicable or transferable courses. The Pass/No Pass option is not recommended for any course in a student's major. Not all courses graded on a Pass/No Pass basis are accepted for transfer by other institutions. Students planning to transfer to another college or university should be aware of the policy of that institution regarding Pass/No Pass grades.

Students may elect the Pass/No Pass grading option in courses in which it is available by notifying the college Office of Admissions and Records, using the appropriate online form, available at http://onlineforms.scccd.edu/passnopass.aspx, no later than the end of the fifth week of a full-term class or within the first 30 percent of a shorter-term course. Students who have elected the Pass/No Pass grading option may reverse this decision only within these same deadlines.

Deadlines for selecting (or reversing) the Pass/No Pass grading option:

<table>
<thead>
<tr>
<th>For a regular 18-week class</th>
<th>By end of fifth week</th>
</tr>
</thead>
<tbody>
<tr>
<td>For all short-term classes (including summer)</td>
<td>By 30% of total class meeting dates (this will vary class by class)</td>
</tr>
</tbody>
</table>

Student Grade Review

If a student is of the opinion that a grade received for a particular course is improper, the student may take action as follows:

1. Discuss the grade received with the instructor involved, or

2. Obtain a Student Grade Review Petition from the Admissions and Records Office. Complete the form for processing no later than the last day of the semester (excluding summer sessions) following the semester for which the grade was received. The student will be notified of action taken.

3. If a student wishes to appeal the decision, the student may submit a written grievance. See Student Grievance Procedure on page 62.

Grade Point Average (GPA)

A student's grade point average (GPA) is computed by dividing the total number of grade points earned by the total number of grade point units. Units for which a grade or other symbol of CR, NC, P, NP, W, I, IP, MW, EW, RD, or X is assigned are not counted as grade point units in the calculation of a grade point average.

Satisfactory Scholarship

Students must achieve at least a "C" average each semester and maintain a 2.0 cumulative grade point average. This means that a student must have at least twice as many grade points as grade point units. See Placement on Academic Probation.

Earning Course and Unit Credit

In addition to earning credits in residence by attending classes, a student may also earn credits in the following ways:

Fresno City College shall award general education credit to any student who passes a College Board AP examination with a minimum score of three in the subjects listed on the following chart. The college will award elective credit for AP examinations in subjects that are not included in the general education patterns designated on the following chart.

The college will also award associate degree general education credit for passing grades on IB and CLEP external exams. Students should consult with a counselor for information on IB and CLEP general education credit if they plan to transfer to a CSU or UC.

This policy does not apply to course-to-course credit for AP/CLEP/IB exams. Course-to-course equivalency is determined by the faculties at Fresno City College. Please meet with a counselor at Fresno City College to discuss the course-to-course equivalency process.
### Advanced Placement Exams (AP)

<table>
<thead>
<tr>
<th>AP Examination/Subject Area</th>
<th>Minimum Score</th>
<th>CSU GE Area (units)</th>
<th>IGETC Area (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART: ART HISTORY</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>C1 or C2 (3)</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>3</td>
<td>A: Natural Sciences (4)</td>
<td>B2 &amp; B3 (4)</td>
</tr>
<tr>
<td>CALCULUS AB</td>
<td>3</td>
<td>Math Competency &amp; D2: Language &amp; Rationality (5)</td>
<td>B4 (3)</td>
</tr>
<tr>
<td>CALCULUS BC</td>
<td>3</td>
<td>Math Competency &amp; D2: Language &amp; Rationality (5, 4)</td>
<td>B4 (3)</td>
</tr>
<tr>
<td>CALCULUS BC/AB Subscore</td>
<td>3</td>
<td>Math Competency &amp; D2: Language &amp; Rationality (5)</td>
<td>B4 (3)</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>3</td>
<td>A: Natural Sciences (5)</td>
<td>B1 &amp; B3 (4)</td>
</tr>
<tr>
<td>CHINESE LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>C2 (3)</td>
</tr>
<tr>
<td>COMPARATIVE GOVERNMENT AND POLITICS</td>
<td>3</td>
<td>B2: Social &amp; Behavioral Sciences (3)</td>
<td>D (3)</td>
</tr>
<tr>
<td>COMPUTER SCIENCE A</td>
<td>3</td>
<td>Elective (3)</td>
<td>N/A (Only one CS exam may be applied)</td>
</tr>
<tr>
<td>COMPUTER SCIENCE PRINCIPLES</td>
<td>3</td>
<td>Elective (3)</td>
<td>N/A (Only one CS exam may be applied)</td>
</tr>
<tr>
<td>ECONOMICS: MACROECONOMICS</td>
<td>3</td>
<td>B2: Social &amp; Behavioral Sciences (3)</td>
<td>D (3)</td>
</tr>
<tr>
<td>ECONOMICS: MICROECONOMICS</td>
<td>3</td>
<td>B2: Social &amp; Behavioral Sciences (3)</td>
<td>D (3)</td>
</tr>
<tr>
<td>ENGLISH LANGUAGE/COMPOSITION</td>
<td>3</td>
<td>Writing/Reading Competency &amp; D1: Language &amp; Rationality (4)</td>
<td>A2 (3)</td>
</tr>
<tr>
<td>ENGLISH LITERATURE/COMPOSITION</td>
<td>3</td>
<td>Writing/Reading Competency &amp; C: Humanities D1: Language and Rationality (4, 3)</td>
<td>A2 &amp; C2 (6)</td>
</tr>
<tr>
<td>ENVIRONMENTAL SCIENCE</td>
<td>3</td>
<td>A: Natural Sciences (4)</td>
<td>B1 &amp; B3 (4)</td>
</tr>
<tr>
<td>FRENCH LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (5)</td>
<td>C2 (3)</td>
</tr>
<tr>
<td>GERMAN LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (5)</td>
<td>C2 (3)</td>
</tr>
<tr>
<td>HISTORY, EUROPEAN</td>
<td>3</td>
<td>B2: Social &amp; Behavioral Sciences or C: Humanities (3)</td>
<td>C2 or D (3)</td>
</tr>
<tr>
<td>HISTORY, U.S.</td>
<td>3</td>
<td>B2: Social &amp; Behavioral Sciences (3)</td>
<td>C2 or D &amp; U.S.-1 (3)</td>
</tr>
<tr>
<td>HISTORY, WORLD</td>
<td>3</td>
<td>B2: Social &amp; Behavioral Sciences (3)</td>
<td>C2 or D (3)</td>
</tr>
<tr>
<td>HUMAN GEOGRAPHY</td>
<td>3</td>
<td>B2: Social &amp; Behavioral Sciences (3)</td>
<td>D (3)</td>
</tr>
<tr>
<td>ITALIAN LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>C2 (3)</td>
</tr>
<tr>
<td>JAPANESE LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>C2 (3)</td>
</tr>
<tr>
<td>LATIN</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>C2 (3)</td>
</tr>
<tr>
<td>MUSIC THEORY</td>
<td>3</td>
<td>Elective (3)</td>
<td>N/A</td>
</tr>
<tr>
<td>PHYSICS 1</td>
<td>3</td>
<td>A: Natural Sciences (4)</td>
<td>B1 &amp; B3 (4)</td>
</tr>
<tr>
<td>PHYSICS 2</td>
<td>3</td>
<td>A: Natural Sciences (4)</td>
<td>B1 &amp; B3 (4)</td>
</tr>
</tbody>
</table>
Academic Regulations

PHYSICS C MECHANICS 3 A: Natural Sciences (4) B1 & B3 (4) 5A & 5C (3)
PHYSICS C, ELECTRICITY/ MAGNETISM 3 A: Natural Sciences (4) B1 & B3 (4) 5A & 5C (3)
PSYCHOLOGY 3 Lifetime Wellness & B2: Social & Behavioral Sciences (3) D (3) 4 (3)
SPANISH LANGUAGE and CULTURE 3 C: Humanities (5) C2 (3) 3B & 6 (3)
SPANISH LITERATURE and CULTURE 3 C: Humanities (3) C2 (3) 3B & 6 (3)
STATISTICS 3 Math Competency& D2: Language & Rationality (4) B4 (3) 2A (3)
STUDIO ART – 2D DESIGN 3 Elective (3) N/A N/A
STUDIO ART – 3D DESIGN 3 Elective (3) N/A N/A
STUDIO ART – DRAWING 3 C: Humanities (3) N/A N/A

*Other Advanced Placement (AP) exams not listed on this chart may be applied toward CSUGE and IGETC certification. Some AP exams allow for additional elective credit that may be applied toward transfer. Satisfaction of specific major requirements is granted by the CSU and UC campus. Consult with a counselor for complete information on AP credit.

Advanced Placement Program Credit (AP)
Courses offered through the College Entrance Examination Board are recognized and individual colleges of this district are authorized to award appropriate placement and/ or credit for these courses in accordance with established college standards. Petitions to apply for credit may be obtained from the Admissions and Records Office.

A residency of 12 units of satisfactory work ("C" average) must be completed at Fresno City College prior to allowance of credit under this program. Currently, AP credit is granted as follows:

### Humanities Division

<table>
<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Lang/ Comp</td>
<td>3</td>
<td>English 1A</td>
<td>4</td>
</tr>
<tr>
<td>English Lit/Comp</td>
<td>3</td>
<td>English 1B</td>
<td>3</td>
</tr>
<tr>
<td>French (Language)</td>
<td>3</td>
<td>French 3</td>
<td>5</td>
</tr>
<tr>
<td>Spanish (Language)</td>
<td>3</td>
<td>Spanish 3 &amp; 4</td>
<td>10</td>
</tr>
<tr>
<td>Spanish (Literature)</td>
<td>3</td>
<td>Spanish 5 &amp; 6</td>
<td>8</td>
</tr>
</tbody>
</table>

### Mathematics, Science and Engineering Division

<table>
<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>3</td>
<td>Biology 3</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3</td>
<td>Chemistry 3A</td>
<td>4</td>
</tr>
<tr>
<td>Calculus AB or BC</td>
<td>3</td>
<td>Mathematics 5A</td>
<td>5</td>
</tr>
<tr>
<td>Physics 1 &amp; 2</td>
<td>3</td>
<td>Physics 2A</td>
<td>4</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
<td>Mathematics 11 or 42</td>
<td>4</td>
</tr>
</tbody>
</table>

### Social Sciences Division

<table>
<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. History</td>
<td>3</td>
<td>History 11 &amp; 12</td>
<td>6</td>
</tr>
<tr>
<td>European History</td>
<td>3</td>
<td>History 2</td>
<td>3</td>
</tr>
<tr>
<td>World History</td>
<td>3</td>
<td>History 23</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>3</td>
<td>Economics 50</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>3</td>
<td>Economics 40</td>
<td>3</td>
</tr>
</tbody>
</table>
Business Division

<table>
<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Accounting</td>
<td>50</td>
<td>ACCTG 4A</td>
<td>4</td>
</tr>
<tr>
<td>Business Law</td>
<td>50</td>
<td>BA 18</td>
<td>4</td>
</tr>
<tr>
<td>Intro to Business Concepts</td>
<td>50</td>
<td>CIT 15</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities Division

<table>
<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Literature</td>
<td>50</td>
<td>ENGL 48A &amp; B</td>
<td>6</td>
</tr>
<tr>
<td>College Composition</td>
<td>50</td>
<td>ENGL 1A</td>
<td>4</td>
</tr>
<tr>
<td>Engl Comp (General) (1978 through April 1986)</td>
<td>390</td>
<td>ENGL 125</td>
<td>4</td>
</tr>
<tr>
<td>Engl Comp (General) (after May 1986 or before 1978)</td>
<td>*600</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Engl Comp w/ Essay</td>
<td>50</td>
<td>ENGL 46A &amp; 46B</td>
<td>6</td>
</tr>
<tr>
<td>Humanities (General)</td>
<td>500</td>
<td>ENGL 45 &amp; ART 6</td>
<td>6</td>
</tr>
</tbody>
</table>

**College-Level Examination Program (CLEP)**

The College-Level Examination Program (CLEP) is designed to be a means through which recognition, academic credit and advanced placement may be given for less conventional forms of education. Those who may have reached a college level of education in certain areas through home or correspondence study, on-the-job training, television courses, and/or other means may take certain CLEP examinations which are offered by the College Entrance Examination Board.

To obtain information and make arrangements to challenge one of the exams listed, individuals may contact the Educational Testing Office at California State University, Fresno (559) 278-2457. Upon receiving the minimum score listed for each exam, students may petition for academic credit for specific CLEP subjects by submitting the official CLEP Test result to the Fresno City College Admissions and Records Office, Counter A.

A residency of 12 units of satisfactory work (“C” average) must be completed at Fresno City College prior to allowance of credit under this program.

*Note: To initiate a Course Substitution for Political Science 2 at Fresno City College through Admissions and Records, the student must successfully submit the following documents for the division to review: 1) Official records of the AP United States Government & Politics exam indicating a score of 3 or higher 2) Official transcripts from an accredited college where a student earned a final grade of “C” or higher in a 1 unit (minimum) course covering California State and Local Government/Politics.

*Note: AP credit in American Government does meet the U.S. Constitution requirement for teaching credential candidates (Ed. Code Sec. 13132). However, it does NOT satisfy the requirements of Political Science 2 because it does not address state and local requirements (Ed. Code Sec. 40404). Candidates seeking a BA/BS at a California State University must satisfy national, state and local government requirements. The requirements at the University of California vary by campus.
### Mathematics, Science and Engineering Division

<table>
<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>MATH 4A</td>
<td>4</td>
</tr>
<tr>
<td>Microbiology</td>
<td>50</td>
<td>BIOL 31</td>
<td>5</td>
</tr>
<tr>
<td>Natural Sciences (Gen)</td>
<td>500</td>
<td>Natural Science1A</td>
<td>4</td>
</tr>
</tbody>
</table>

### Social Sciences Division

<table>
<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afro-American History</td>
<td>50</td>
<td>AFRAM 1</td>
<td>3</td>
</tr>
<tr>
<td>American Government</td>
<td>50</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>American History I</td>
<td>50</td>
<td>HIST 11</td>
<td>3</td>
</tr>
<tr>
<td>American History II</td>
<td>50</td>
<td>HIST 12</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics, Intro</td>
<td>50</td>
<td>ECON 50</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics, Intro</td>
<td>50</td>
<td>ECON 40</td>
<td>3</td>
</tr>
<tr>
<td>Sociology</td>
<td>50</td>
<td>SOC 1A</td>
<td>3</td>
</tr>
<tr>
<td>Psychology, General</td>
<td>50</td>
<td>PSY 2</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>HIST 1</td>
<td>3</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>HIST 2</td>
<td>3</td>
</tr>
<tr>
<td>Soc Sci &amp; Hist (Gen.)</td>
<td>500</td>
<td>Soc Sci</td>
<td></td>
</tr>
</tbody>
</table>

* Meets California State Teacher Certification (Proficiency) requirements.

** Satisfies U.S. Constitution requirements for State Certification (Ed. Code Sec. 1312; not for Ed. Code 40404).

### International Baccalaureate (IB) Exams (Higher Level only)

Credit for lower division major preparation is granted for International Baccalaureate Higher Level examinations for Fresno City College equivalent courses as listed below. Petitions to apply for credit may be obtained from the Admissions and Records Office.

#### Fine, Performing, and Communication Arts Division

<table>
<thead>
<tr>
<th>IB EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre HL</td>
<td>4</td>
<td>Theatre Arts 30 &amp; 41</td>
<td>6</td>
</tr>
</tbody>
</table>

#### Humanities Division

<table>
<thead>
<tr>
<th>IB EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A: Lang/Lit HL</td>
<td>4</td>
<td>English 1B &amp; 40</td>
<td>6</td>
</tr>
<tr>
<td>Language A: Literature HL</td>
<td>4</td>
<td>English 1B &amp; 40</td>
<td>6</td>
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</tbody>
</table>

#### Math, Science, and Engineering Division

<table>
<thead>
<tr>
<th>IB EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5</td>
<td>Biology 3</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5</td>
<td>Chemistry 3A</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Social Sciences Division

<table>
<thead>
<tr>
<th>IB EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics HL</td>
<td>5</td>
<td>Economics 25</td>
<td>3</td>
</tr>
</tbody>
</table>
International Baccalaureate may also be used to fulfill one or more GE areas.

<table>
<thead>
<tr>
<th>FRESNO CITY COLLEGE: INTERNATIONAL BACCALAUREATE (IB)</th>
<th>CSU GE AREA: MINIMUM SCORE</th>
<th>CSU GE AREA: MINIMUM SCORE</th>
<th>IGETC AREA: MINIMUM SCORE</th>
<th>IGETC AREA: MINIMUM SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB Biology HL</td>
<td>5</td>
<td>B2(3)</td>
<td>5</td>
<td>5B(3)</td>
</tr>
<tr>
<td>IB Chemistry HL</td>
<td>5</td>
<td>B1(3)</td>
<td>5</td>
<td>5B(3)</td>
</tr>
<tr>
<td>IB Economics HL</td>
<td>5</td>
<td>D(3)</td>
<td>5</td>
<td>4B(3)</td>
</tr>
<tr>
<td>IB Geography HL</td>
<td>5</td>
<td>D(3)</td>
<td>5</td>
<td>4E</td>
</tr>
<tr>
<td>IB History (any region) HL</td>
<td>5</td>
<td>C2 or D (3)</td>
<td>5</td>
<td>3B or 4F (3)</td>
</tr>
<tr>
<td>IB Language A Literature HL (any language, except English)</td>
<td>5</td>
<td>3B and 6A(3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IB Language A Language and Literature HL (any language)</td>
<td>4</td>
<td>C2(3)</td>
<td>5</td>
<td>3B(3)</td>
</tr>
<tr>
<td>IB Language A Language and Literature HL (any language)</td>
<td>4</td>
<td>C2(3)</td>
<td>5</td>
<td>3B(3)</td>
</tr>
<tr>
<td>IB Language A1 (any language) HL</td>
<td>4</td>
<td>C2(3)</td>
<td>F13*</td>
<td></td>
</tr>
<tr>
<td>IB Language A2 (any language) HL</td>
<td>4</td>
<td>C2(3)</td>
<td>F13*</td>
<td></td>
</tr>
</tbody>
</table>

Credit by Examination

To be eligible for course credit by examination, a student must be enrolled at the college and be in good standing during the semester in which they apply for credit by examination. Credit by examination will not be allowed if the student has received previous college credit for the course, or if the student previously enrolled and received a grade or W, or is currently enrolled in a course for which the course to be taken by exam is a prerequisite. The college reserves the right to deny credit by examination to any student.

The faculty of each department determine which department courses may or may not be challenged for credit by examination. See the appropriate department chair or dean of instruction to learn which courses may be taken for credit by examination and to ascertain the proper procedure for credit by examination.

A student planning to transfer to another college or university should be aware of the policy of that institution regarding transferability of courses. Application for credit by examination approved by the discipline faculty, the department chair, and the appropriate dean of instruction must be filed with the Admissions and Records Office no later than the end of the sixth week of the semester.

Units earned from credit by examination courses are not counted for financial aid or veterans’ benefits eligibility. No financial aid of any kind is available for credit by exam.

An appropriate fee for expense of this special service is charged for each course challenged and is payable by the end of the ninth week of the semester. Student must make arrangements with the instructor to take the examination prior to the fifteenth week of the semester.

The letter grade (A-F) earned on the examination will be awarded at the time grades are submitted to the Admissions and Records by the instructor giving the examination and will be entered on the student’s transcript in a manner which clearly indicated that the course grade and credit were earned by examination. A student who fails the credit by examination may not attempt the course again by credit by examination.
Credit for Military Service

A veteran/service person who has completed at least one year of active duty may submit military documents and transcripts for possible Fresno City College course credit. The documentation must delineate completion of basic military training or credit earned in a service person's opportunity college.

A Veteran, who completes basic training, will automatically receive the following semester credit hours for the respective branch of Military service:

**Army**
- 1 credit hour – Physical Conditioning/Fitness
- 1 credit hour – Marksmanship
- 1 credit hour – Outdoor Skills
- 1 credit hour – First Aid

**Navy**
- 1 credit hour – Physical Conditioning/Fitness
- 1 credit hour – Personal/Community Health
- 1 credit hour – First Aid and Safety
- 1 credit hour – Swimming

**Marines**
- 1 credit hour – Physical Conditioning/Fitness
- 1 credit hour – Marksmanship
- 1 credit hour – Outdoor Skills
- 1 credit hour – First Aid/Health

**Air Force**
- 1 credit hour – Physical Conditioning/Fitness
- 1 credit hour – Marksmanship
- 1 credit hour – Outdoor Skills
- 1 credit hour – First Aid/Safety

**Coast Guard**
- 1 credit hour – Physical Conditioning/Fitness
- 1 credit hour – Swimming
- 1 credit hour – Boating/Seamanship
- 1 credit hour – First Aid

Veterans may also receive non-transferable elective credit for in-service education, training, and/or their military occupational specialty (MOS). A maximum of 30 units, including the basic training credit listed above, will be allowed.

Active duty reservists who have completed basic training, but served less than one year of active duty, are allowed a total of four (4) semester credit hours of elective credit which includes (2) semester credit hours of physical conditioning which can be used to fulfill the PE graduation requirement.

To receive military credit hours, the student must present a copy of their DD 214 or other appropriate documents citing pertinent data to the Fresno City College Veterans Office.

Individual Study

Individual Study 49 is a course that allows students to work individually with an instructor on a creative research project culminating with a topic paper, construction project, composition, etc. It allows exploration in greater depth than can be experienced in a regular course or may delve into subject matter not normally covered in a regular course.

A contract between the student and instructor must be developed, signed by the instructor, and approved by the dean.

Student must register for Individual Study 49 no later than the end of the third week of a regular semester or the fifth day of the six-week summer session.

Travel-Study Credit

Credit granted by accredited colleges and universities for travel-study programs sponsored by these institutions will be accepted by Fresno City College. For college-level travel-study programs credit up to 12 semester units (at the maximum rate of one unit per week) may be granted upon the evaluation of official transcripts sent to Fresno City College by the institution through which the units are earned.

Withdrawal/Dropping

 Withdrawal from College

A student may withdraw from all of his/her classes, thereby withdrawing from the college through the last day of the ninth week of instruction (or 50 percent of a term*, whichever is less) online or in person with the Admissions and Records office. The student may also mail or fax a signed letter of request postmarked by the 50 percent point to completely withdraw from his/her classes to the Admissions and Records Office (please include student identification and date of birth). Students are encouraged to discuss complete class withdrawals with an academic counselor. Upon submission of a withdrawal form, the student will be withdrawn from all of his/her classes and an entry of "W" will be recorded for each class in which the student was enrolled. The "Ws" will not be used in calculating grade point averages, but excessive "Ws" will be used as factors in progress probation and dismissal procedures.

Dropping/Withdrawal Due to Extenuating Circumstances

- Exceptions to the 50 percent drop deadline may apply due to extenuating circumstances.

Extenuating circumstances are verified cases of accidents, illnesses, death in the immediate family, jury duty, declaration of war, natural calamity, military conscription, family or job displacement, instructor error, or other circumstances beyond the control of the student which are justifiable in the judgment of the college president or their designee. (CCR, Title 5, Section 55024.)
Petitions for withdrawal due to extenuating circumstances are available from the Admissions and Records Office.

1. The extenuating circumstances must be fully documented and verified when appropriate.

2. The petition for withdrawal must be submitted no later than the end of the semester immediately following the semester in which the extenuating circumstance occurred.

3. The student must petition to withdraw from all classes she/he is enrolled in (consult with Admissions & Records for certain exceptions that may apply).

4. The student's instructor(s) will be consulted concerning the request for withdrawal.

5. Approved class withdrawals due to extenuating circumstances shall be recorded as an “EW.” The “EW” shall not be used in the following: calculating grade point average, towards progress probation or dismissal calculations, towards the permitted number of withdrawals, or counted as an enrollment attempt.

6. Once final grades have been posted, the instructor of record must be consulted for an appropriate grade review.

7. Exceptions may be considered on a case-by-case basis upon appeal to the college's Academic Standards Committee.

* Term in this context means the duration of a class, which may differ from the length of the normal semester.

Academic Renewal

An open-door college should provide ample opportunity for students to succeed. Since the community college admits students with a diverse range of abilities, aspirations and interests, the college must provide sufficient flexibility in its policies to enable a student to overcome a poor academic record. While the college must have a balance between policy flexibility and the maintenance of academic regulations so as to ensure grade standards throughout the curricula, this flexibility cannot be allowed to abrogate the individual student’s educational responsibility.

Course Repetition

For the purpose of course repetition and all other grade-related issues.

Substandard grades or marks shall be defined as meaning course work for which the student has earned a “D” “F” “NP” “NC” or “W”.

Satisfactory grades shall be defined as meaning course work for which the student has earned a “C” or better, “P” or “CR” grade.

A mark of “W” is recorded for a withdrawal from a course on or after the census point or 30% of the semester (whichever is less) and before the end of the ninth week or 50% of the class meeting dates.

For the purpose of this policy AR 4225, “extenuating circumstances” are taken to mean verified cases of accidents, illness, jury duty, military conscription, declaration of war, family or job displacement, instructor error, or other circumstances beyond the control of the student which are justifiable in the judgment of the college president or his/her designee as defined by California Code of Regulations, Title 5.

Repetition of Courses Designated as Non-Repeatable

For the benefit of a better grade, students may repeat a course for which they have received substandard grades or marks for a total of three attempts. Students may repeat a course one time without petition to the Academic Standards Committee. Students must petition to the Academic Standards Committee to repeat a course for which two or more substandard grades or marks have been recorded.

The first two substandard grades will be excluded in computing the GPA if the student repeats the course two or more times. The student’s academic record will be marked so that all grades remain legible, ensuring a true and complete academic history.

A student who has earned a substandard grade in a course at Fresno City College and repeats the equivalent course successfully (“C” or better) at another accredited college or university, can petition through the Admissions and Records office for an Alleviation of Substandard grade.

A student who has completed a course with a substandard grade at another accredited college or university may repeat the equivalent course in the State Center Community College District (SCCCD). Upon completion of the Fresno City College course, the student must request an official transcript be sent to the college or university where the substandard grade was earned.

Petition to Repeat Courses for Alleviation of Substandard Grades

Students who wish to petition to repeat a course for which two or more substandard grades or marks have been recorded, may do so through the Admissions and Records office.

Upon petitioning to repeat a course for a third attempt, Fresno City College students are required to meet with a counselor before any action will be taken by the Academic Standards Committee or designee. Only the first two substandard grades will be excluded in computing the GPA.
Upon petitioning to repeat a course for a fourth or more attempt, Fresno City College students are required to meet with a counselor and complete or update their student education plan (SEP) and provide statements as to:

- Why the student has been unable to complete the course work successfully, supporting documentation may be provided as well.
- Why the student will be able to be successful in college in the future. What will be different now and in the future?

All fourth attempt petitions are reviewed by the Academic Standards Committee or designee. If the petition is approved, the grade earned in the fourth or more attempts will be averaged with the third grade earned in computing the cumulative grade point average.

**Repetition of Courses with a Satisfactory Grade**

A course in which a satisfactory grade was earned may be repeated when circumstances exist which justify such a repetition. Students must petition the Academic Standards Committee for approval.

Reasons for such repetition include but are not limited to:

- significant lapse in time (no less than 36 months since the grade was obtained)
- change in technology;
- Re-certification / training requirement, or other justifiable reasons.

If the petition is approved and a student completes the course, the course and grade will be listed on the academic record, and will be coded with a symbol indicating the course is excluded in the computation of the grade point average.

**Legally Mandated Training**

Course repetition is allowed when it is necessary for a student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. Fresno City College students must petition and present documentation that the course is necessary to the Academic Standards Committee for approval.

Such courses may be repeated for credit any number of times, regardless of whether or not substandard grades were previously recorded, and the grade and units received each time shall be included for purposes of calculating the student's grade point average.

**Disabled Students**

Course repetition for disabled students is subject to the course repetition limitation; however, additional repetitions may be authorized under the following circumstances:

- When continuing success of the student in other general and/or special classes,
- When specific special classes are essential in completing a student's preparation for enrollment into other regular or special classes, or
- When the student has a student educational contract which involves a goal other than completion of the special class in question and repetition of the course will further achievement of that goal.

Fresno City College students must petition the Academic Standards Committee for approval. The course and grade will be listed on the academic record, and will be coded with a symbol indicating the course is excluded in the computation of the grade point average.

**Repetition of Courses Designated as Repeatable**

Repeatable courses are progressive in nature and provide an expanded education experience when repeated. These courses are identified in the college catalog indicating the maximum allowable repetitions.

If a student repeats a course designated as repeatable in which a substandard grade has been recorded, the District will exclude no more than two previous substandard grades.

**Courses Related in Content**

Pursuant with the Title 5, section 55041(c), SCCCD has created Courses Related in Content (Course Families) for those active participatory courses in Art, Dance, Music, Physical Education, and Theatre Arts that are related in content. The courses related in content include courses of related content offered at each college and center.

Students will be limited to a total of four enrollments, per courses related in content. An enrollment is defined as:

- Actively enrolled; or
- Previously earned grade or mark (W).

Students can view all course families lists at the Admissions and Records website.

The course families are:

<table>
<thead>
<tr>
<th>COURSE FAMILY</th>
<th>RELATED CONTENT GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART</td>
<td>Ceramics, Crafts, Drawing, Painting, Printmaking, Sculpture, Visual Art Fundamentals</td>
</tr>
<tr>
<td>DANCE</td>
<td>Ballet, Competition/Conference, Flexibility, Performance, Folk, Jazz, Modern, Social, Tap</td>
</tr>
<tr>
<td>MUSIC</td>
<td>Brass, Chamber Concert Ensemble, Guitar, Jazz Chamber Ensemble, Jazz Large Ensemble, Large Concert Ensemble, Percussion, Piano, Specialty Ensemble, Strings, Voice, Woodwinds</td>
</tr>
</tbody>
</table>
Academic Renewal - Alleviation of Substandard Grades without Repetition

Substandard work, not reflective of the student's present scholastic level of performance, may be alleviated and disregarded in the computation of grade point averages. Course work that is still appropriate for the student's present educational objectives may be alleviated only by repetition (see Course Repetition, page 30). Course work thought to be no longer appropriate for repetition may be alleviated by the student making formal application to the Admissions and Records Office.

In this case, a student will be eligible for alleviation when:

- A period of at least two years has elapsed since the work to be alleviated was recorded.
- A student is pursuing a specific academic goal (e.g. associate degree or certificated program in the District).
- A student has completed 12 semester units with at least a 3.0 GPA; or
- A student has completed 24 semester units with at least a 2.5 GPA; or
- A student has completed a total program with a 2.0 GPA or better.

For students who change majors attending FCC, courses will be alleviated from the old major under the following condition:

- All of the conditions stated in AR4240 must be met.
- The student should have completed half of the new major core courses. Only major specific courses count toward this requirement. General Education courses related to the major do not count toward this requirement.
- The student's four most recent semesters must have an average GPA of 2.00 or higher and must be from within SCCCD.

In determining eligibility for this provision the college will consider the most recently completed semester first and look to previous semesters' total GPA in descending chronological order.

The amount of work to be alleviated shall not exceed the amount of work the student has successfully completed since the substandard work was recorded.

When academic work is alleviated, the student's permanent record shall be appropriately annotated in a manner to ensure that all entries are legible and that a true and complete academic history is maintained.

Probation and Dismissal

Satisfactory Progress

State law requires students to maintain satisfactory progress while enrolled at a community college. Students who do not make satisfactory progress by completing courses and/or achieving satisfactory grades will be affected in the following ways:

Placement on Progress Probation

A student who has attempted and accumulated a total of 12 or more semester units shall be placed on progress probation when the number of units for which entries of "W", "I", "NP" and "NC" are recorded reaches or exceeds fifty percent (50%).

Removal from Progress Probation

A student on progress probation because of an excess number of units for which entries of "W", "I", "NP" and "NC" are recorded shall be removed from progress probation when the percentage of units in this category drops below fifty percent (50%).

Placement on Academic Probation

A student shall be placed on academic probation when:

1. The cumulative grade point average for a student who has attempted an accumulated total of 12 or more semester units falls below 2.0 in all units which were graded on the basis of letter grades, or
2. The student's cumulative grade point average falls below 2.0 in two consecutive semesters. The student will be subject to being placed on "subject to being disqualified" status.

Removal from Academic Probation

A student shall be removed from academic probation when the student's cumulative grade point average becomes 2.0 ("C") or better.
Counseling for Probationary Students

Each student on probation will be provided counseling and guidance service, including regulation of the student's program according to individual aptitude and achievements as determined by the counseling office. Students subject to dismissal shall have all selected courses approved by a counselor prior to registration. In addition, students who have completed 40 units or more and are on probation must have all selected courses approved by a counselor. A student on probation, whether academic or progress, may not carry more than 12 units without special approval of a counselor.

Academic/Progress Dismissal

For purposes of this section, semesters shall be considered consecutive on the basis of the student's enrollment exclusive of summer session.

A student who has attempted in at least 12 semester units shall be dismissed for one semester, exclusive of summer session, if during each of three consecutive semesters the student's performance falls under either one or any combination of the following two conditions:
1. The student's cumulative grade point average was 2.0 or less.
2. The percentage of units in which the student was enrolled for which entries of "W," "I," "NP," and "NC" were recorded reached or exceeded fifty percent (50%).

Circumstances for Appeal or Exception of Academic Progress Dismissal

Students who are on academic or progress dismissal for personal reasons beyond the control of the student shall, upon successful appeal, be exempted from the conditions of time imposed above.

Students on probation, either academic or progress, may not be dismissed after their third semester of below satisfactory work if during that third semester and every subsequent semester they maintain a 2.0 GPA and complete more than 50% of their units until their cumulative GPA and completed units are above the probationary level.

Readmission Following Academic/Progress Dismissal

A student who has been dismissed because of the district's academic/progress dismissal policy must petition to be readmitted.

Following the student's first dismissal, they will not be admitted to a district college until one semester has elapsed. If the student fails to maintain a grade point average of at least 2.0, or fails to complete more than fifty percent (50%) of the units in which the student enrolled during the first semester of attendance following their initial dismissal, the student shall be dismissed for a period of one year (second dismissal). If the student fails to meet these academic and progress standards during the next semester in which they enroll, the student will be dismissed again. This third dismissal shall be considered permanent. However, a student may petition for admission after two years. Students are encouraged to improve their record by attending summer session. Petitions for readmission are available in the Counseling Center. Unit limitations and course selection will be set for readmitted students by the counseling staff.

Reports to Students

Final Grade Report

Final grade reports are mailed only by request to the student's address on file with the college. Grades are available on WebAdvisor (www.fresnocitycollege.edu) under Academic Profile. Grade reports will be withheld for those students who fail to return school equipment or who have any unpaid accounts.

Certifications of Enrollment

Certifications of enrollment shall be requested in writing at https://onlineforms.scccd.edu/reqforverification.aspx. A minimum of five working days for the preparation of certifications is required. Certifications will not be provided if the student has a "monetary hold" on the permanent file.

The following definitions are used by Fresno City College when certifying the enrollment of our students to outside agencies such as the Veterans Administration, lending institutions, the Social Security Administration, insurance companies, and the California Student Aid Commission:

<table>
<thead>
<tr>
<th>Type</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>12 units or more</td>
</tr>
<tr>
<td>Three quarter-time</td>
<td>9 to 11.5 units</td>
</tr>
<tr>
<td>Half-time</td>
<td>6 to 8.5 units</td>
</tr>
<tr>
<td>Limited</td>
<td>fewer than 6 units</td>
</tr>
</tbody>
</table>

Honors and Awards*

Leon S. Peters Honors Program

The Leon S. Peters Honors Program at Fresno City College recognizes and meets the needs of academically gifted students. Students who qualify, and are accepted to enter the Honors Program, benefit from an enriched educational experience that consists of a specially selected curriculum set within the framework of the transfer programs of all University of California and California State University campuses.
Special honors sections of regular classes usually have 25 or fewer students per section. They are taught by specially selected, experienced and highly qualified faculty. The entire program can be completed in four semesters. Entrance into the program is competitive. For additional details about the benefits, requirements, and curriculum, see the Honors Program section in this catalog, and consult with the Honors Program Coordinator, who can be reached by calling (559) 442-4600, ext. 8470.

Dean’s List
A 3.5 grade point average for the previous semester with a minimum load of 12 units.

Honors at Graduation

High Honors
To be recognized at commencement, a 3.3/3.49 cumulative grade point average.

Highest Honors
To be recognized at commencement, a 3.5/4.0 cumulative grade point average.

The designation of honors in the commencement program is based on the grades earned during the semester preceding a student’s graduation.

College Sanctioned Accouterments at Graduation

To insure the best experience possible for graduation, students are asked to adhere to the College traditions when participating in this meaningful ceremony. Decorated mortarboards and/or gowns are not permitted.

The following are a list of accouterments officially sanctioned by the College for students to wear in addition to their cap and gown:

<table>
<thead>
<tr>
<th>African American Graduation</th>
<th>Sash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Gamma Sigma Honor Society</td>
<td>Gold Cord</td>
</tr>
<tr>
<td>Dean’s Medallion</td>
<td>Medallion</td>
</tr>
<tr>
<td>President’s Medallion</td>
<td>Medallion</td>
</tr>
<tr>
<td>High Honors</td>
<td>Gold Tassel</td>
</tr>
<tr>
<td>Latino Graduation</td>
<td>Sash</td>
</tr>
<tr>
<td>Leon S. Peters Honors Program</td>
<td>Stoll</td>
</tr>
<tr>
<td>Phi Theta Kappa Honor Society</td>
<td>Gold Cord</td>
</tr>
<tr>
<td>Veteran Student</td>
<td>Red, White &amp; Blue Cord</td>
</tr>
</tbody>
</table>

Honor Societies

Alpha Gamma Sigma
The Alpha Zeta Chapter of Alpha Gamma Sigma is a scholastic honor society of California Community Colleges. Membership is based on academic achievement, involvement in community service projects and leadership development activities. Members are eligible to participate for credit in a special volunteerism course. Affiliate membership and course participation are open to students who are otherwise ineligible for regular membership. Both regular and affiliate members will be expected to maintain the highest standards of behavior and represent the organization and college in an exemplary manner. Academic qualifications: students entering from high school who are life members of CSF and those with at least a 3.5 GPA are eligible for temporary membership their first semester. Continuing students with a cumulative GPA of 3.0 in at least 12 units are eligible. Students must maintain a 3.0 GPA each semester (a one semester’s grace period allowed if GPA is above 2.5). Permanent membership may be awarded to members who have completed 60 units and maintained a cumulative GPA of 3.25 for two semesters or 3.5 for one semester and have participated satisfactorily in chapter activities. Final authority on eligibility rests with faculty advisors. For additional information contact the Honors Program office at (559) 442-4600, ext. 8470.

Phi Theta Kappa
Phi Theta Kappa is the international honor society for community colleges. Theta Beta, the Fresno City College chapter, helps students to advance the society’s hallmarks of scholarship, leadership, fellowship, and service on campus and in the community. Phi Theta Kappa offers support from fellow scholars of all ages, ethnic backgrounds, economic levels, and fields of study who share a variety of interests and ideas. The sense of community among members and faculty advisors allows one to take full advantage of opportunities at the college and at state and international meetings. The commonality is superior scholarship and a commitment to continuing excellence and educational opportunities. To be eligible, a student must have completed at least 12 units of college course work with a cumulative GPA of 3.5 or better. Freshmen students are also eligible for provisional membership during their first semester at the college. For further information, contact the Honors Program office at (559) 442-4600, ext. 8470.

*In all cases, unit load refers to units carried at Fresno City College.*
CERTIFICATE AND DEGREE REQUIREMENTS

Catalog Rights
For the purpose of this section, continuous enrollment is defined as enrollment in at least one primary semester (fall or spring). Any of the following academic records constitutes as enrollment during a semester: A, B, C, D, F, P, NP, CR, NC, Y, N, I, IP, RD, W, EW, and MW.

A student may elect to meet the requirements for an academic program from one of the following:
1. The catalog in effect at the time the student first applied or reapplied and began continuous enrollment;
2. In the event of a major/program change, the student may assume new catalog rights under the following conditions:
   • The change of major/program must be approved by counselor, and
   • The major selected must be within a catalog during the student's continuous enrollment;
3. The catalog in effect at the time of the student's program completion.

Certificates
Certificates for a course or a series of courses may be offered by disciplines/departments/divisions. A certificate may be awarded with a minimum of “C” average for finishing a course or courses leading to specific competencies. These certificates will not appear on a student's transcript.

See page 86 for a list of certificates.

Certificate of Achievement
A certificate of achievement shall be awarded to students who successfully complete a specified curriculum (minimum of 12 units) with a minimum “C” grade in each required course.

In order to receive the certificate of achievement, the student shall apply for the certificate with Admissions and Records upon completion of the requirements.

See page 86 for a list of certificates of achievement.

Certificate of Completion
A certificate of completion may be awarded after meeting the designated competencies in non-credit courses.

See page 86 for a list of certificates of completion.

Course Classification
Pursuant to revisions to the California Administrative Code, Title 5, Sections 55002 and 55062, all courses listed within the college catalog fall into one of the following classifications:
• Credit, Degree Applicable
• Credit, Nondegree Applicable
• Noncredit

See Course Classification System, page 230, for a list of credit, nondegree applicable and noncredit courses.

Graduation Requirements
It is the student's responsibility to be aware of degree and certificate requirements and of the student's standing in regard to those requirements. Students are urged to consult a counselor regarding any questions about degree or certificate requirements for the catalog year the student selects.

Exceptions to any of the regulations which follow will be judged by the “Rule of Equity” which requires that any waiver of standards be determined on the merit of the individual case.

The college reserves the right to determine what courses may be considered as equivalents for the stated degree, certificate, and general education requirements listed in this catalog. Please see the appropriate division dean for pertinent information.
General Education for the AA/AS Degree

General Education course work is intended to complement a concentrated study in a single discipline or “major.” It should provide a broad base of educational experience about aspects of the world which a major area of study may not include. The student who completes the general education requirements at Fresno City College will have made noteworthy progress towards becoming truly educated and prepared for a lifetime of learning.

Following are the major areas of General Education:

**Natural Sciences.** Courses in the natural sciences are those which examine the physical universe, its life forms and its natural phenomena. To satisfy the general education requirement in natural sciences, a course should help the student develop an appreciation and understanding of the scientific method through direct experience and encourage an understanding of the relationships between science and other human activities. This category would include introductory or integrative courses in astronomy, biology, chemistry, general physical science, geology, meteorology, oceanography, physics and other scientific disciplines.

Students who complete natural sciences general education courses will be able to:
1. Analyze basic concepts of biological and/or physical science to evaluate and debate the validity of scientific information.
2. Express an understanding of the relationships between science and other human activities.

**Social and Behavioral Sciences.** Courses in the social and behavioral sciences are those which focus on people as members of society. To satisfy the general education requirement in social and behavioral sciences, a course should help the student develop an awareness of the method of inquiry used by the social and behavioral sciences. It should stimulate critical thinking about the ways people act and have acted in response to their societies and how their actions in turn change their society. It should also promote appreciation of how societies and social subgroups operate. This category would include introductory or integrative survey courses in anthropology, economics, history, political science, psychology, sociology and related disciplines.

Students who complete social and behavioral sciences general education courses will be able to:
1. Analyze how people act and have acted to shape and respond to their societies and the natural environment.
2. Describe how societies and social subgroups and individuals operate in specific historical and contemporary contexts.
3. Compare and critique the principles, perspectives, and methods of inquiry and measurement appropriate to the particular discipline being studied.

**Humanities.** Courses in the humanities examine the philosophical, literary, aesthetic, and cultural expressions of humans. These courses develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them through artistic and cultural creation. They develop aesthetic understanding and, through study of traditional and changing cultural perspectives, foster better informed value judgments. These courses also offer students the opportunity to explore their creativity and imagination and to move consciously towards an awareness of their capability for artistic self-expression. This category will include art history, literature and film, philosophy and morality, comparative religion, the fine and performing arts and language. When we ask who we are, and what our lives ought to mean, we are using the humanities.

Students who complete humanities general education courses will be able to:
1. Describe how peoples of different times and cultures relate to their environments through individual artistic expression and shared cultural traditions.
2. Articulate an understanding of the relationships between the arts, the humanities and themselves.
3. Describe, explain, discuss, evaluate, compare and contrast theories to understand the nature of reasoning, reality and value.

**Language and Rationality.** Courses in language and rationality are those which develop for the student principles and applications of language that lead to logical thought, clear and precise expression, and critical evaluation of communication in any endeavor.
1. English Composition: Courses fulfilling this requirement include both expository and argumentative writing.
2. Communication and Analytical Thinking: Courses fulfilling these requirements include oral communication, mathematics, logic, statistics, computer language and programming, and related disciplines.
Students who complete language and rationality general education courses will be able to:

1. Write clear, logically organized essays using expository and argumentative modes and apply conventions of documentation when appropriate.
2. Apply logical reasoning to make decisions based on information.
3. Solve problems, explain conclusions, employ and evaluate evidence and inferences; and/or critique the thinking of self and others.
4. Construct, deliver, and comprehend appropriate and clear oral messages and exchanges in interpersonal, public, and professional contexts.

Multiple Degrees

A student may earn more than one AA and/or AS degree from Fresno City College. The same AA and/or AS degree cannot be awarded by more than one college in the district. Please see a counselor for more information.

Requirements for the Associate Degrees for Transfer

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T degree are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

To view the most current list of Fresno City College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to http://adegreewithaguarantee.com/. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

Requirements for AA and AS Degrees

Associate in Science Degree

Minimum requirements for the associate in science degree are the same as for the associate in arts degree with the exception of the major requirement which specifies completion of a specific pattern of courses in any occupational curriculum or completion of at least twenty (20) units in the physical sciences, the biological sciences and engineering.

Associate in Arts Degree

1. Sixty (60) units with at least 2.0 (“C”) grade point average in all courses applicable to the associate degree.
2. Residence requirements: (a) A minimum of twelve (12) degree applicable units in residence at district colleges or centers, with attendance during the last semester prior to meeting graduation requirements, or (b) A total of forty-five (45) units in residence at district colleges or centers if not in attendance during the last semester prior to meeting graduation requirements.
3. At least eighteen (18) units in a discipline (major) or from related disciplines with a grade of “C” or better in each course.
4. Competence in writing, demonstrated by completion of English 1A or 1AH with a grade of 2.0, “C” or better. (The course used to fulfill this requirement may also be used to fulfill area D, Part 1, below, of the general education requirement in language and rationality: composition.)
5. Competence in reading, demonstrated by (a) Meeting the reading requirement for English 1A, 1AH eligibility by an appropriate placement test score. (b) Completion of English 1A or 1AH with a grade of “C” or better.
6. Competence in oral communication, demonstrated by the completion of Communication 1, 2, 4, 8, 8H or 25 with a grade of 2.0, “C” or better.
7. Competence in mathematics, demonstrated by (a) An appropriate placement test score or (b) Completion with a grade of 2.0, “C” or better one of the following classes: Mathematics 4A, 4B, 5A, 5B, 6, 7, 10A, 10B, 11, 21, 26, 42, 45, 102, 103.
8. Familiarity with computer concepts and computer use, demonstrated by completing with a grade of "C" (2.0) or better, one of the following: (a) Applied Technology 10; Business & Technology 1, 2, 9, 10, or 28; Computer Information Technology 12, 15, or 17; Graphic Communications 14, 15, 16, 17, 20A, 20B, 22, 23, 24A, 25, 27, 28, 30, 31, 32, 34, 39A, 40A, 41, 52, 53; Library Skills 2; or (b) A course in the student's major that has been designated by the division of that major as meeting the computer literacy requirement; or (c) A college examination of computer literacy.

9. Awareness of lifetime physical and mental wellness, demonstrated by completion of Allied Health 1, Health Science 1, Psychology 2, Psychology 2H, Psychology 33, or Child Development 38/Psychology 38.

10. Two physical education and/or dance classes.

   The physical education courses that will meet this requirement are DEVSER 50-55, PE 3-9, 12-15C, 17, 23, 27, 29B-43B, 29C-31C, 33C-43C, 45, and 70-72.

   Exceptions will be considered for:
   - Veterans, P.O.S.T program candidates, Basic Fire Academy graduates, or
   - Students who submit a physician's statement certifying that they are not physically able to participate in physical education classes.
      - Exemption forms are available at the Health Services office, Students Services Building, lower level.
      - Must be documented as permanent by student's physician.
      - Once verified, Health Services will forward the completed exemption form to Admissions and Records.

11. Completion of one of the following courses on the principles of national, state, and local government, including the study of American institutions and ideals: Political Science 2, 2H, or 110. (The course used to fulfill this requirement may also be used to satisfy area B, Part 1, below, of the general education requirement in social and behavioral sciences.)

12. A minimum of eighteen (18) units in general education, including at least three (3) units in each of areas (A) and (C), and at least three (3) units in both parts 1 and 2 of areas (B) and (D).

A. Natural Sciences (3 units)
   - Anthropology 1, 1L
   - Applied Technology 120
   - Astronomy 10
   - Chemistry 1A, 3A, 3B
   - Geography 1, 7, 8
   - Geology 1, 2, 5, 7, 8, 9, 12
   - Physics 2A, 2B, 4A
   - Physical Science 11, 42

B. Social and Behavioral Sciences (6 units: B.1. = 3 units; B.2. = 3 units)
   1. Political Science 2/2H, or 110
      (The course used to fulfill this requirement may also be used to satisfy degree requirement 11, American institutions, above.)
   2. Other Social and Behavioral Sciences
      - African-American Studies 1, 2, 4, 34, 41
      - American Indian Studies 20, 31, 32, 34
      - American Studies 11
      - Anthropology 1, 2/2H, 3, 4, 12, 28
      - Asian-American Studies 1, 8, 10, 15, 25, 30
      - Business Administration 20
      - Chicano-Latino Studies 11, 12, 13, 14, 24, 28, 29, 30
      - Child Development 5, 39
      - Criminology 5
      - Economics 25, 40/40H, 50/50H
      - Food and Nutrition 43
      - Geography 2, 4A, 4B, 20
      - Global Studies 1, 2
      - History 1/1H, 2/2H, 3, 11, 12/12H, 15, 17, 18, 21, 22, 25, 29, 30, 34
      - Human Services 20
      - Political Science 1, 5, 24, 25
      - Psychology 5, 25, 36, 39
      - Sociology 1A/1AH, 2, 10, 14, 31, 32
      - Women's Studies 10, 22, 24, 41, 43, 47
C. Humanities (3 units)
- African-American Studies 3, 8, 15, 17
- American Indian Studies 35
- American Sign Language 1, 2, 3, 4, 5, 6, 7, 8
- Architecture 10, 11, 15A, 15B, 20, 30
- Armenian 1, 2
- Art 2, 3, 4, 5/5H, 6/6H, 7, 8, 9, 10, 11, 12A, 12B, 14, 15, 16, 17, 18, 19, 20, 21, 22B, 23, 25A, 28, 29, 31, 32A, 32B, 52, 55
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- Chicano-Latino Studies 17A, 18, 20, 21, 27B
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- Dance 17A, 20A, 20B, 27B, 30
- Film 1, 2A, 2B, 3, 5, 6, 7
- French 1, 2, 3
- German 1, 2
- Graphic Communications 39A, 40A
- Hmong 1, 2
- Humanities 10/10H, 11/11H, 42
- Japanese 1, 2
- Journalism 1, 16
- Linguistics 10/10H, 11
- Philosophy 1A/1AH, 1B, 1C/1CH, 1D, 5, 6
- Photography 5, 6, 15, 17, 18, 30, 32, 40
- Portuguese 1, 2
- Spanish 1, 2, 3NS, 4, 4NS, 5, 6, 7, 41, 42
- Women’s Studies 36

D. Language and Rationality
(6 units: D.1. = 3 units; D.2. = 3 units)
1. Composition
   (The course used to fulfill this general education area requirement may also be used to satisfy degree requirement 4, competence in writing, above.)
   - English 1A/1AH
2. Communication and Analytical Thinking
   - Applied Technology 10
   - Business Administration 10/10H, 18, 30, 33
   - Communication 25
   - Computer Information Technology 60, 63, 65, 66, 69
   - Computer Science 40, 41
   - Criminology 13
   - Decision Science 21, 23
   - Electrical Systems Technology 51
   - English 3/3H
   - Graphic Communications 14, 15, 16, 17, 20A, 20B, 22, 23, 30, 41, 51
   - Marketing 10
   - Math 102, 103, 4A, 4B, 11/11H, 42 or any advanced math class
   - Philosophy 2/2H, 6
   - Political Science 13
   - Psychology 42
   - Sociology 1B
   See a counselor for other courses which fulfill this requirement.

Application for Associate Degree or Certificate of Achievement
A candidate for an associate in arts degree, associate in science degree or a certificate of achievement must file a graduation application for the degree or certificate. An application for graduation for a degree or certificate of achievement will be accepted when a student is within a year of potential graduation and/or completion. A student who needs a formal evaluation prior to the year of graduation/completion may appeal this policy by providing evidence of special program requirements. Application deadlines are listed in the academic calendar of this catalog. No student is a candidate for graduation until the application is completed. Graduation ceremonies for degree candidates are held at the end of the spring semester each year. Diplomas and certificates are mailed to successful candidates approximately sixty (60) working days after fulfilling graduation requirements.
Preparation to Enter Four-year Colleges or Universities

Fresno City College provides the first two years of a four-year college or university program. The majority of Fresno City College students are enrolled in such transfer programs and may complete all or most of their general education and lower division major requirements before transferring. Students can transfer to a baccalaureate institution once they have completed 60 or more transferable units with the required GPA.

The requirements for transfer and the requirements for a certificate and/or associate degree program can be very different. With careful planning a student may be able to earn a certificate and/or associate degree as well as meet transfer requirements. Therefore, the importance of reaching a decision regarding one’s objectives at the time of enrollment cannot be overemphasized. Also, there are differences in the transfer requirements of colleges and universities. Therefore, it is advisable for entering students to plan a program which meets the requirements of a particular college or university to which they wish to transfer. Students should consult the catalog of the specific college or university which they plan to attend. Counselors will assist in interpreting catalog statements and requirements and with developing a Student Educational Plan (SEP) upon request. Catalogs of many universities and colleges are available in the Fresno City College Counseling/Transfer Center. It is, however, wise for students to order their own personal copies directly from the college or university of their choice.

Careful selection of courses at Fresno City College will prepare a student for transfer with junior standing to a baccalaureate institution and at the same time enable the student to complete the requirements for the associate degree. Those Fresno City College courses which are accepted at other schools are not always exact equivalents of their courses but normally are accepted as meeting the same requirements.

In accordance with Executive Order No. 167 from the Chancellor’s Office of the California State Universities, Fresno City College baccalaureate level courses are numbered 1 to 99. These courses are listed on page 48 of this catalog. The courses so designated by Fresno City College shall be accepted by any campus of the State University for elective credit toward its baccalaureate degrees. Students can complete the general education requirements for all of the California State Universities by following the appropriate pattern which follows. Completion of the general education requirements will be certified on the Fresno City College final transcript upon the student’s request.

Fresno City College courses that transfer to the University of California campuses are listed on page 48. Students who plan to transfer to one of the UC campuses should consult the latest catalog of the university of their choice to determine lower division requirements.

University of California breadth requirements for each separate campus and some major program sheets are available for student use in the Transfer Center.

Articulation

Articulation is a process of developing formal written agreements that identify courses at one college that are accepted in lieu of specific courses at another college or that fulfill a specific statewide pattern of general education. Fresno City College has developed numerous articulation agreements with California State University and University of California campuses. These agreements may be viewed at www.assist.org or in the Fresno City College Transfer Center.

Articulation agreements have also been developed with some California private and out-of-state colleges and universities. These agreements are available in the Fresno City College Transfer Center as well. See a counselor for assistance.
Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST)

ASSIST is a single computerized database located at www.assist.org that provides access to articulation agreements developed between California Community Colleges, the California State Universities (CSU), and the Universities of California (UC). As articulation agreements are updated, so is the information maintained in ASSIST. See a counselor for assistance in how to use ASSIST.

- **CSU Transferable Courses**
  These lists identify courses from a community college that transfer to any CSU campus for baccalaureate/transfer credit.

- **CSU GE-Breadth Certification Courses**
  These are lists of courses from a community college that apply to the CSU GE-Breadth certification requirements.

- **CSU US History, Constitution, and American Ideals Courses**
  These lists identify courses from a community college that satisfy the US history, Federal Constitution, and California state and local government degree requirements.

- **IGETC for UC and CSU**
  These are lists of courses from a community college that apply to the Intersegmental General Education Transfer Curriculum (IGETC) requirements.

- **UC Transferable Courses**
  These agreements list courses from community colleges that transfer to all University of California campuses.

Agreements with Other Campuses—Campus Specific

- **By Major**
  These agreements specify courses at a sending institution that fulfill lower-division major requirements at a receiving institution.

- **By Department**
  These agreements identify courses at a sending institution that are acceptable in lieu of courses at a receiving institution. They display courses taught by the departments at a specified institution.

- **For General Education/Breadth**
  These agreements indicate the courses at a sending institution that satisfy the general education or breadth requirements at a receiving institution. See a counselor for assistance on how to use ASSIST.

Course Identification Numbering Systems (C-ID)

The Course Identification Numbering Systems (C-ID) is a statewide numbering system independent from the course numbers assigned by local California colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult with the ASSIST database at www.assist.org for specific information on C-ID course designations. Counselors can always help students interpret or explain this information.

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<td>Communication 8, Group Communication</td>
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<tr>
<td>COMM 160B</td>
<td>Communication 26, Intercollegiate Forensics Laboratory</td>
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<td>COMM 190</td>
<td>Communication 4, Persuasion</td>
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<tr>
<td>COMP 112</td>
<td>Computer Science 1, Introduction to Programming Concepts and Methodologies</td>
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<tr>
<td>COMP 142</td>
<td>Computer Science 45, Computer Architecture and Organization</td>
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<td>Course</td>
<td>Description</td>
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<tr>
<td>COMP 152</td>
<td>Computer Science 26, Discrete Mathematics for Computer Science</td>
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<td>ECE 120</td>
<td>Child Development 1, Principles and Practices of Teaching Young Children</td>
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<td>ECE 130</td>
<td>Child Development 3, Introduction to Curriculum</td>
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<td>ECE 200</td>
<td>Child Development 20, Observation and Assessment</td>
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<td>ECE 210</td>
<td>Child Development 37A, Early Childhood Practicum</td>
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<td>ECE 220</td>
<td>Child Development 6, Health, Safety and Nutrition in Early Childhood Education</td>
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<td>ECE 230</td>
<td>Child Development 15, Diversity and Culture in Early Childhood Education Programs</td>
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<td>ECON 201</td>
<td>Economics 40 or 40H, Introduction to Microeconomics</td>
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<td>ECON 202</td>
<td>Economics 50 or 50H, Introduction to Macroeconomics</td>
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<td>EDUC 200</td>
<td>Education 30 + Education 19, Introduction to Teaching and Work Experience (Cooperative), Occupational</td>
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<td>ENGL 100</td>
<td>English 1A or 1AH, Reading and Composition</td>
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<td>ENGL 105</td>
<td>English 3 or English 3H, Critical Reading &amp; Writing</td>
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<td>ENGL 120</td>
<td>English 1B, Introduction to the Study of Literature</td>
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<td>ENGL 130</td>
<td>English 48A, Introduction to American Literature to 1865</td>
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<td>ENGL 135</td>
<td>English 48B, Introduction to American Literature from 1865 to the Present</td>
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<tr>
<td>ENGL 140</td>
<td>English 44A, World Literature to the Renaissance</td>
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<td>ENGL 145</td>
<td>English 44B, World Literature since the Renaissance</td>
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<td>ENGL 160</td>
<td>English 46A, English Literature to 1800</td>
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<td>ENGL 165</td>
<td>English 46B, English Literature from 1800 to the Present</td>
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<td>ENGL 200</td>
<td>English 15A + English 15B, Creative Writing: Poetry and Creative Writing: Fiction</td>
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<td>ENGR 110</td>
<td>Engineering 10, Introduction to Engineering</td>
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<td>ENGR 130</td>
<td>Engineering 8, Statics</td>
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<td>ENGR 150</td>
<td>Engineering 2, Graphics</td>
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<td>ENGR 180</td>
<td>Engineering 1A, Elementary Plane Surveying 1</td>
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<td>ENGR 220</td>
<td>Engineering 5, Programming and Problem Solving in MATLAB</td>
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<tr>
<td>ENGR 260</td>
<td>Engineering 6, Circuits with Lab</td>
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<td>ENGR 260L</td>
<td>Engineering 5, Circuits with Lab</td>
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<tr>
<td>FIRE 100X</td>
<td>Fire Technology 1, Fire Protection Organization</td>
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<tr>
<td>FIRE 110X</td>
<td>Fire Technology 2, Fire Prevention Technology</td>
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<td>FIRE 120X</td>
<td>Fire Technology 3, Fire Protection Equipment and Systems</td>
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<td>GEOG 110</td>
<td>Geography 1, Physical Geography</td>
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<td>GEOG 120</td>
<td>Geography 2, Cultural Geography</td>
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<tr>
<td>GEOG 125</td>
<td>Geography 4A + Geography 4B, World Geography and World Geography</td>
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<tr>
<td>GEOG 140</td>
<td>Geography 20, Geography of California</td>
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<td>GEOG 160</td>
<td>Geography 30, Regional Field Studies</td>
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<td>GEOL 101</td>
<td>Geology 1, Physical Geology</td>
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<tr>
<td>GEOL 110</td>
<td>Geology 2, Historical Geology</td>
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<td>GEOL 110L</td>
<td>Geology 2L, Historical Geology Lab</td>
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<td>GEOL 121</td>
<td>Geology 9, Introduction to Earth Science</td>
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<td>GEOL 200</td>
<td>Geology 4, Geology of California</td>
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<td>HIST 130</td>
<td>History 11, History of the United States to 1877</td>
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<td>History 12 or 12H, History of the United States since 1877</td>
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<td>HIST 160</td>
<td>History 23, World History II, since 1500</td>
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<td>HIST 170</td>
<td>History 1 or 1H, Western Civilization to 1648</td>
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<td>HIST 180</td>
<td>History 2 or 2H, Western Civilization since 1648</td>
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<td>ITIS 120</td>
<td>Computer Information Technology 15, Computer Concepts</td>
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<td>Journalism 1, Introduction to Mass Communication</td>
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<td>JOUR 110</td>
<td>Journalism 3, Newswriting</td>
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<tr>
<td>JOUR 120</td>
<td>Journalism 14, Multimedia Reporting</td>
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<tr>
<td>JOUR 130</td>
<td>Journalism 11A, Beginning Media Writing Practicum</td>
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<tr>
<td>JOUR 130</td>
<td>Journalism 11C, Advanced Media Writing Practicum</td>
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<tr>
<td>JOUR 130</td>
<td>Journalism 11D, Editorial Leadership</td>
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<tr>
<td>JOUR 131</td>
<td>Journalism 11B, Intermediate Media Writing Practicum</td>
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<td>JOUR 131</td>
<td>Journalism 11C, Advanced Media Writing Practicum</td>
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<td>JOUR 131</td>
<td>Journalism 11D, Editorial Leadership</td>
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<td>JOUR 160</td>
<td>Photography 30, Editorial Photography</td>
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<td>JOUR 210</td>
<td>Journalism 13, Advanced Reporting and Writing</td>
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<td>KIN 100</td>
<td>Physical Education 62, Introduction to Kinesiology</td>
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<td>Health Science 2, First Aid and Safety</td>
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<td>MATH 110</td>
<td>Decision Science 23, Business Statistics</td>
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<td>MATH 110</td>
<td>Mathematics 11, Elementary Statistics</td>
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<td>Mathematics 42 or Psychology 42, Statistics for the Behavioral Sciences</td>
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<td>Mathematics 10A, Structure and Concepts in Mathematics</td>
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<td>Decision Science 21, Finite Mathematics</td>
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<td>Mathematics 21, Finite Mathematics</td>
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<td>MATH 151</td>
<td>Mathematics 4B, Pre-Calculus</td>
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<td>MATH 160</td>
<td>Computer Science 26, Discrete Mathematics for Computer Science</td>
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<td>MATH 210</td>
<td>Mathematics 5A, Mathematical Analysis I</td>
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<td>MATH 220</td>
<td>Mathematics 5B, Mathematical Analysis II</td>
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<td>MATH 230</td>
<td>Mathematics 6, Mathematical Analysis III</td>
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<td>Mathematics 7, Introduction to Differential Equations</td>
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<td>MATH 250</td>
<td>Mathematics 26, Elementary Linear Algebra</td>
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<td>MATH 851</td>
<td>Mathematics 4A, Trigonometry</td>
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<td>MATH 900S</td>
<td>Mathematics 5A and 5B, Mathematical Analysis I and Mathematical Analysis II</td>
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<td>MUS 100</td>
<td>Music 12, Music Appreciation</td>
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<td>MUS 110</td>
<td>Music 3, Music Fundamentals</td>
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<td>MUS 120</td>
<td>Music 1A, Music Theory</td>
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<td>MUS 125</td>
<td>Music 7A, Ear Training I</td>
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<td>MUS 130</td>
<td>Music 1B, Music Theory</td>
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<td>MUS 135</td>
<td>Music 7B, Ear Training: Level II</td>
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<td>Music 2A, Music Theory</td>
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<td>MUS 145</td>
<td>Music 7C, Ear Training: Level III</td>
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<td>MUS 150</td>
<td>Music 2B, Music Theory</td>
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<td>MUS 155</td>
<td>Music 7D, Ear Training: Level IV</td>
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<td>MUS 160</td>
<td>Music 22, Intermediate/Advanced Piano</td>
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<td>MUS 160</td>
<td>Music 26, Intermediate/Advance Voice</td>
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<td>MUS 160</td>
<td>Music 29, Intermediate/Advanced Guitar</td>
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<td>MUS 160</td>
<td>Music 42A, Intermediate/Advanced Brass (Brass Choir)</td>
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<tr>
<td>MUS 160</td>
<td>Music 42B, Intermediate/Advanced Woodwinds (Woodwind Choir)</td>
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<td>MUS 160</td>
<td>Music 42C, Intermediate/Advance Strings (String Orchestra)</td>
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<td>MUS 160</td>
<td>Music 42D, Intermediate/Advanced Percussion (Percussion Ensemble)</td>
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<td>MUS 160</td>
<td>Music 74A, Intermediate/Advanced Brass Performance Practices</td>
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<td>MUS 160</td>
<td>Music 74B, Intermediate/Advanced Woodwind Performance Practices</td>
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<td>MUS 160</td>
<td>Music 74C, Intermediate/Advanced Strings Performance Practices</td>
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<tr>
<td>MUS 160</td>
<td>Music 74D, Intermediate/Advanced Percussion Performance Practices</td>
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<td>MUS 180</td>
<td>Music 30, College Choir</td>
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<td>MUS 180</td>
<td>Music 34, Fresno Chorale</td>
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<td>MUS 180</td>
<td>Music 39A, Baroque/Classical Opera</td>
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<td>MUS 180</td>
<td>Music 39B, Romantic and Modern Opera</td>
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<td>MUS 180</td>
<td>Music 40, Concert Band</td>
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<td>MUS 180</td>
<td>Music 41, Jazz Ensemble</td>
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<td>MUS 180</td>
<td>Music 46, Symphony Orchestra</td>
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<td>MUS 180</td>
<td>Music 47A, Jazz Combo: New Orleans, Swing and Bop</td>
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<td>MUS 180</td>
<td>Music 47B, Jazz Combo: Cool and Mainstream</td>
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<td>MUS 180</td>
<td>Music 47C, Jazz Combo: Modern and Fusion</td>
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<td>MUS 180</td>
<td>Music 47D, Jazz Combo: World Music</td>
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<td>MUS 180</td>
<td>Music 48, Latin Jazz Ensemble</td>
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<td>MUS 180</td>
<td>Music 53, Latin Jazz Workshop</td>
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<td>MUS 180</td>
<td>Music 54, Afro-Latin Ensemble</td>
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<td>MUS 180</td>
<td>Music 55, Afro-Caribbean Ensemble</td>
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<td>MUS 180</td>
<td>Music 60, Symphonic Choir</td>
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<td>MUS 180</td>
<td>Music 68, Symphonic Band</td>
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<td>MUS 180</td>
<td>Music 70, Contemporary Jazz Ensemble</td>
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<td>MUS 180</td>
<td>Music 71, Lab Jazz Ensemble</td>
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<td>MUS 180</td>
<td>Music 72, Jazz Composer's Orchestra</td>
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<td>MUS 180</td>
<td>Music 76, College Philharmonic Orchestra</td>
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<td>MUS 180</td>
<td>Music 90, Jazz Composers Workshop</td>
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<td>MUS 180</td>
<td>Music 91, Jazz Composers Ensemble</td>
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<td>MUS 180</td>
<td>Music 92, Vocal Jazz Ensemble</td>
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<td>NUTR 110</td>
<td>Food and Nutrition 40, Nutrition</td>
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<td>Food and Nutrition 1, Principles of Food Preparation</td>
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<td>PHIL 100</td>
<td>Philosophy 1A or 1AH, Theories of Knowledge and Reality</td>
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<td>PHIL 120</td>
<td>Philosophy 1C or 1CH, Ethics</td>
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<td>PHIL 140</td>
<td>Philosophy 3B, Modern Philosophy</td>
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<td>PHIL 210</td>
<td>Philosophy 6, Symbolic Logic</td>
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<td>PHS 102</td>
<td>Allied Health 1, Introduction to Public Health</td>
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<td>PHYS 100S</td>
<td>Physics 2A and 2B, General Physics 1 and General Physics 2</td>
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<td>PHYS 105</td>
<td>Physics 2A, General Physics 1</td>
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<td>PHYS 110</td>
<td>Physics 2B, General Physics 2</td>
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<td>PHYS 140</td>
<td>Natural Science 1A, Integrated Science: Physics and Chemistry</td>
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<td>PHYS 200S</td>
<td>Physics 4A + Physics 4B + Physics 4C, Physics for Scientists and Engineers</td>
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<td>PHYS 205</td>
<td>Physics 4A, Physics for Scientists and Engineers</td>
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<td>PHYS 210</td>
<td>Physics 4B, Physics for Scientists and Engineers</td>
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<td>PHYS 215</td>
<td>Physics 4C, Physics for Scientists and Engineers</td>
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<td>POLS 110</td>
<td>Political Science 2 or 2H, American Government</td>
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<td>POLS 120</td>
<td>Political Science 3, Introduction to Political Theory and Thought</td>
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<tr>
<td>POLS 130</td>
<td>Political Science 5, Comparative Government</td>
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<td>POLS 140</td>
<td>Political Science 24, International Relations</td>
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<td>POLS 150</td>
<td>Political Science 1, Modern Politics</td>
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<td>PSY 110</td>
<td>Psychology 2 or 2H, General Psychology</td>
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<td>PSY 115</td>
<td>Psychology 33, Personal and Social Adjustment</td>
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<td>PSY 120</td>
<td>Psychology 16, Abnormal Psychology</td>
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<td>PSY 130</td>
<td>Psychology 25, Human Sexuality</td>
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<td>PSY 150</td>
<td>Psychology 36, Biological Psychology</td>
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<td>PSY 170</td>
<td>Psychology 5, Social Psychology</td>
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<td>PSY 180</td>
<td>Psychology 38 or Child Development 38, Lifespan Development</td>
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<td>PSY 200</td>
<td>Psychology 45, Introduction to Research Methods in Psychology</td>
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<td>SJS 110</td>
<td>American Studies 10, American Pluralism: A Search for Common Ground in a Multicultural Society</td>
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<td>SJS 110</td>
<td>American Studies 11, Law and Democracy</td>
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<td>SJS 120</td>
<td>Women's Studies 10, Changing Roles of Women</td>
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<td>SOCI 110</td>
<td>Sociology 1A or 1AH, Introduction to Sociology</td>
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Transfer to California State University (CSU)

Transfer Requirements to California State University (CSU)

For students who plan to transfer and complete a bachelor’s degree, Fresno City College offers the first two years of most baccalaureate level (four-year) degree programs. Each baccalaureate level institution has a basic pattern of lower-division general education and specific major requirements which may be fulfilled at Fresno City College. In addition, students may make up any high school grade or subject deficiencies which are required for entrance to baccalaureate level colleges or universities.

Students should acquaint themselves with the current catalog of the college to which they plan to transfer. A library of current college and university catalogs and internet access to college catalogs and websites are available in the Fresno City College Transfer Center. It is also recommended that students work closely with their counselor in order to fulfill requirements for the college of their choice. However, the final responsibility for the selection of proper transfer, major, and general education courses rests with the student.

California State University (CSU) Admission

Students who completed college units before they graduated from high school or during the summer between high school graduation and CSU enrollment are considered first time freshmen and must meet freshmen admission requirements.

Otherwise, students who have completed college units are considered transfer students.

Students who have completed 59 or fewer CSU transferable semester college units at the time of transfer are considered lower division transfer students.

Students who have completed 60 or more CSU transferable semester units at the time of transfer are considered upper division transfer students.

Lower Division Transfer Students

Students are eligible for admission with fewer than 60 CSU transferable semester units (90 quarter units) if the student:

- Has a college grade point average of 2.0 or better in all transferable college units attempted.
- Is in good standing at the last college or university attended, i.e., you are eligible to re-enroll.
- Meets the admission requirements for a first-time freshman or have successfully completed necessary courses to make up the deficiencies you had in high school if you did not complete the 15-unit pattern of college preparatory subjects.
- Meets the eligibility index required of a freshman.

Some campuses may require lower-division transfer students to have completed English composition and general education mathematics prior to transfer. Contact your campus of choice to determine whether there are admission limits on the number of lower-division transfer students.
Upper Division Transfer Students

Students are eligible for admission with 60 or more CSU transferable semester units (90 quarter units) if the student:

- Has a college grade point average of 2.0 or better (2.4 for non-California residents) in all transferable college units attempted.
- Is in good standing at the last college or university attended, i.e., is eligible to re-enroll.
- Has completed or will complete prior to transfer at least 30 semester units (45 quarter units) of courses equivalent to CSU general education requirements with a grade of “C” or better. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication, and critical thinking) and at least one course of at least 3 semester units (4 quarter units) required in college-level mathematics.

General Education Requirements

For California State University Certification (CSU-GE)

The CSU General Education-Breadth program allows California community college transfer students to fulfill lower-division general education requirements for any CSU campus prior to transfer. This curriculum provides an alternative to IGETC requirements and to the campus specific university GE-Breadth requirements. It is important to note that CSU GE-Breadth certification is not an admission requirement, nor does completion guarantee admission to the campus or program of choice.

Up to 39 of the 48 GE-Breadth units required can be transferred from and certified by a California community college. Students who are certified with 39 semester units of lower division GE-Breadth units cannot be held to additional lower division GE courses at the CSU campus. Upon enrollment at CSU, all transfer students will be required to complete a minimum of 9 semester units of upper division general education. Students without certification may be held to the general education pattern developed for CSU students which may vary greatly from the community college CSU-GE Breadth pattern.

Fresno City College CSU General Education – Breadth 2019-2020

**Area A: English Language Communication and Critical Thinking**

Nine semester units minimum with one course from A1, A2, and A3 (“C” or better grade required in A1, A2, and A3).

- **Area A1, Oral Communication**
  - Communication 1, 2, 4, 8
- **Area A2, Written Communication**
  - English 1A/1AH
- **Area A3, Critical Thinking**
  - Communication 25
  - Criminology 13
  - English 3/3H
  - Philosophy 2, 6
  - Political Science 13

**Area B: Scientific Inquiry and Quantitative Reasoning**

Nine semester units minimum with at least one course in B1, B2, and B4 (“C” or better grade required in B4.) One course in B1 or B2 must contain a lab component indicated by (L) or be accompanied by a course in B3.

- **Area B1, Physical Science**
  - Astronomy 10(L)
  - Chemistry 1A(L), 1B(L), 3A(L), 3B(L), 8A, 28A, 28B
  - Geography 1(L), 7(L), 8(L)
  - Geology 1(L), 2, 4, 5, 7, 8, 12
  - Natural Science 1A(L)
  - Physical Science 11
  - Physics 2A(L), 2B(L), 4A(L), 4B(L), 4C(L)
- **Area B2, Life Science**
  - Anthropology 1
  - Biology 3(L), 4(L), 5(L), 6(L), 7(L), 11A/11AH(L), 11B(L), 14, 20(L), 21A(L), 21B(L), 22(L), 31(L), 55
- **Area B3, Laboratory Activity**
  - Anthropology 1L
  - Chemistry 29A, 29B
  - Geography 1
  - Geology 2L
- **Area B4, Mathematics/Quantitative Reasoning**
  - Computer Science 26
  - Decision Science 21, 23
  - Mathematics 3A, 4A, 4B, 5A, 5B, 6, 10A, 10B, 11/11H, 21, 26, 42, 45
  - Psychology 42
Area C: Arts and Humanities
Nine semester units minimum with at least one course each from C1 and C2.

- **Area C1, Arts**
  - African-American Studies 3, 8, 15
  - American Indian Studies 35
  - Architecture 15A, 15B
  - Art 2, 3, 5/5H, 6/6H, 7, 9, 10, 11, 12A, 12B, 14, 15, 17, 55, 60, 70
  - Asian-American Studies 55
  - Chicano-Latino Studies +17A, 20, 22, +27B
  - Communication 12
  - Dance +17A, 20A, +27B, 30
  - Film 1, 2A, 2B, 6
  - Music 3, 12, 13, 15, 16, 17
  - Photography 5
  - Theatre Arts 12, 30, 31, 44A
+Only one course can be used to satisfy this area.

- **Area C2, Humanities**
  - African-American Studies 17
  - American Sign Language 1, 2, 3, 5, 7, 8
  - Armenian 1, 2
  - Asian-American Studies 8
  - Chicano-Latino Studies 21
  - Chinese 1, 2
  - English 1B, 12, 14, 15A, 15B, 17, 36, 40, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B
  - Film 1, 2A, 2B, 3
  - French 1, 2, 3
  - German 1, 2
  - History 1/1H, 2/2H
  - Hmong 1, 2
  - Humanities 10/10H, 11/11H, 42
  - Japanese 1, 2
  - Linguistics 10/10H
  - Philosophy 1A/1AH, 1B, 1C/1CH, 1D, 3A, 3B, 5
  - Political Science 3
  - Portuguese 1, 2
  - Spanish 1, 2, 2NS, 3, 3NS, 4, 4NS, 5, 6, 7, 9, 41, 42
  - Theatre Arts 32
  - Women's Studies 36

Area D: Social Sciences
Nine semester units minimum from at least two disciplines.

- African-American Studies 1, 4, 34
- American Indian Studies 20, 31, 34
- American Studies 10, 11
- Anthropology 2/2H, 3, 4, 8
- Asian-American Studies 1, 10, 15, 25, 30
- Business Administration 20
- Chicano-Latino Studies 11, 12, 29, 30

Area E: Lifelong Learning and Self-Development
Three semester units minimum. *Three units of physical education alone is insufficient to fulfill AREA E.

- Child Development 30, 38, 39
- Economics 25, 40/40H, 50/50H
- Geography 2, 4A, 4B, 20
- Global Studies 1, 2
- History 1/1H, 2/2H, 3, 11, 12/12H, 15, 17, 18, 20, 21, 22, 23, 25, 29, 30, 34
- Human Services 10
- Journalism 1, 16
- Political Science 1, 2/2H, 3, 5, 24
- Psychology 2/2H, 38, 39
- Sociology 1A/1AH, 1B, 2, 10, 32
- Women's Studies 10, 22, 30, 47

Total Minimum Units Required for Certification ...........39

Notes: Courses listed in more than one area or sub-area may only be used one time.
The same course, e.g. CLS/DANCE 27, can be counted only once.
Some CSU campuses have restrictions on when courses in AREAS A and B must be completed prior to transfer.
Additional courses may be added to the Fresno City College CSU GE-Breadth. An updated CSU General Education Sheet may be obtained from the Counseling Center, the Transfer Center, the Fresno City College Website, or www.assist.org.

Students transferring into Engineering and Liberal Studies majors may be required to complete specific courses in each area of CSU GE-Breadth or they may be waived/exempted from specific areas. See a counselor for assistance.

Students who have credit from other colleges should meet with a counselor regarding General Education Certification.

A maximum of 70 semester units earned at community college may be transferred to CSU. Course work completed above the 70 units may be used to satisfy GE and major preparation even though the units will not count toward the bachelor's degree.
U.S. History, Constitution, and American Ideals

To graduate from a California State University a student must complete, with a “D” or better grades, a combination of courses which are identified as meeting the U. S. History, Constitution, and American Ideals requirements. Courses at Fresno City College which meet this requirement are: one course from History 11 or 12 combined with one course from Political Science 2 or 2H. These courses may also be used simultaneously to satisfy course requirements on the CSU GE-Breadth pattern. (See page 47).

California State University Transfer Course List (CSU)

The following courses are baccalaureate-level courses transferable to all California State University campuses. Their acceptance in meeting general education or major requirements will vary among the campuses. Consult the appropriate catalog, major sheet or with a counselor for specific information.

Note: A number of courses are cross-referenced—the same course is listed in more than one area, department or discipline—usually with the same course number. Credit can be earned only once for cross-referenced courses. See the individual course listings in the “Course Descriptions” section of the catalog.

Accounting 4A, 4B, 19, 51, 52, 53A, 54, 56, 57, 61, 70, 73

Aerospace Studies 1A, 1B, 2A, 2B, 3, 5

African-American Studies 1, 2, 3, 4, 5, 6, 8, 15, 17, 34, 41

Allied Health 1, 2, 19, 20, 21

American Indian Studies 20, 31, 32, 34, 35

American Sign Language 1, 2, 3, 4, 5, 6, 7, 8, 20, 21, 22

American Studies 10, 11

Anthropology 1, 1L, 2/2H, 3, 4, 8, 12, 13, 15, 16A, 16B, 24, 28, 30

Applied Technology 10, 11, 19, 21, 40

Architecture 10, 11, 12, 14, 15A, 15B, 20, 21, 22, 24, 30, 31, 32, 34, 40, 41A, 42

Armenian 1, 2, 3


Asian-American Studies 1, 8, 10, 15, 20, 25, 30, 55

Astronomy 10

Automotive Technology 9, 10, 19, 51, 52, 53, 54, 55, 56, 57, 58, 58A, 58B, 58C, 61, 62, 63, 64, 65, 66, 67, 68, 68A, 68B, 68C

Automotive Technology – General Motors ASEP 51, 52, 53, 54, 55, 56, 57

Biology 3, 4, 5, 6, 7, 11A/11AH, 11B, 14, 20, 21A, 21B, 22, 31, 46, 47, 55

Business Administration 5, 10, 10H, 18, 19, 20, 24, 25, 27, 28, 30, 31, 33, 34, 35, 38, 40, 43, 44, 48, 49, 50, 51, 52, 58

Business & Technology 1, 2, 5, 6, 7, 9, 10, 11, 13, 18, 19, 23, 24, 25, 26, 28, 29, 33, 43

Chemistry 1A, 1B, 3A, 3B, 8A, 18L, 20, 28A, 28B, 29A, 29B

Chicano-Latino Studies 1, 2, 4, 8/8H, 12, 20, 25, 26

Computer Aided Drafting and Design 12, 15, 17, 19, 20, 21, 23, 24, 26, 28, 31, 40, 45, 48A, 48B, 50, 54A, 54B, 55, 57, 58B, 58C, 58D, 58E, 59, 60, 63, 65, 66, 69, 70, 80, 81, 82, 84, 85, 90, 93, 94, 95, 97, 99

Computer Science 1, 26, 40, 41, 45

Construction 14, 18, 50, 50A, 50B, 51, 52A, 52B, 53, 55, 56A, 56AL, 56B, 56B, 60, 65

Counseling 43, 48, 53, 54

Criminology 1, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 15, 16, 18, 19, 20, 21, 23, 24, 25, 36


Decision Science 21, 23

Dental Hygiene 1A, 1B, 1C, 1D, 2, 3A, 3B, 4, 5A, 5B, 5C, 6A, 6B, 7A, 7B, 8A, 8B, 9, 10, 11, 12, 13, 14

Developmental Services 50, 51, 52, 53, 54, 55

Drafting 12

Economics 25, 40/40H, 50/50H

Education 6, 7, 19, 19X, 30


Engineering 1A, 2, 4, 5, 6, 7, 10, 11, 12

English 1A/1AH, 1B, 3/3H, 12, 14, 15A, 15B, 15C, 15D, 17, 20, 36, 40, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B

Fashion Merchandising 19, 26, 27, 28

Film 1, 2A, 2B, 3, 5, 6, 7
Fire Technology 1, 2, 3, 4, 5, 8, 9, 14, 23, 24, 25, 26, 27, 29, 30E, 50L
Food and Nutrition 1, 2, 35, 40, 41, 42, 43, 45
Food Service Management 11, 15, 19, 25, 35, 38
French 1, 2
Geography 1, 2, 4A, 4B, 7, 8, 10, 12, 18, 20, 30
Geology 1/1H, 2, 3, 4, 5, 7, 8, 9, 12
German 1, 2
Global Studies 1, 2
Health Information Technology 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16
Health Science 1, 2
Heating, Ventilation & Air Conditioning 50, 51, 52, 53, 54, 56, 57
History 1/1H, 2/2H, 3, 11, 12/12H, 15, 17, 18, 20, 21, 22, 23, 25, 29, 30, 34
Hmong 1, 2
Honors 1A, 1C, 1D, 1E, 1F, 1G
Human Services 10, 11, 18, 19A, 19B, 20, 24, 25, 30, 35, 40, 42, 43, 44, 60
Humanities 10/10H, 11/11H, 42
Individual Study 49
Japanese 1, 2
Journalism 1, 2, 3, 4, 6, 11A, 11B, 11C, 11D, 12, 13, 14, 15, 16, 19
Learning Assistance 1, 2A, 2B, 3
Library Skills 1
Library Technology 51, 52A, 52B, 54, 55, 56, 57, 61, 62, 63
Linguistics 10/10H, 11
Marketing 1, 10, 11, 12, 14, 17, 19, 21, 22
Mathematics 3A, 4A, 4B, 5A, 5B, 6, 7, 10A, 10B, 11/11H, 21, 26, 42, 45
Medical Assisting 1, 2, 4, 5, 6A, 6B, 19
Military Science 1, 2, 11, 12, 50, 55, 60, 65
Music 1A, 1AP, 1B, 2A, 2B, 3, 4, 5, 6, 7A, 7B, 7C, 7D, 8, 8B, 8C, 9, 10A, 10B, 12, 13, 15, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 34, 35, 39A, 39B, 39C, 39D, 40, 41, 42A, 42B, 42C, 42D, 46, 47A, 47B, 47C, 47D, 48, 49, 53, 54, 55, 57, 59, 60, 63, 67, 68, 70, 71, 72, 74A, 74B, 74C, 74D, 76, 78, 90, 91, 92, 93
Natural Science 1A
Paralegal 1, 2A, 2B, 3, 4, 5, 6A, 6B, 7, 8, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20
Philosophy 1A/1AH, 1B, 1C/1CH, 1D, 2/2H, 3A, 3B, 5, 6
Photography 5, 6, 12, 15, 17, 18, 23, 26, 30, 32, 40, 45, 49, 57
Physical Science 11, 42
Physics 2A, 2B, 4A, 4B, 4C
Political Science 1, 2/2H, 3, 5, 13, 24, 25
Portuguese 1, 2
Psychology 2, 5, 12, 16, 18, 25, 33, 36, 38, 39, 42, 45
Radiologic Technology 1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D, 3, 4A, 4B, 4C, 5A, 5B, 5C
Real Estate 40, 41
Recreation 19, 20, 21, 23
Respiratory Care 16, 17, 18, 20, 21, 21B, 22, 23, 24, 25
Sociology 1A/1AH, 1B, 2, 5, 7, 10, 14, 31, 32
Spanish 1, 2, 2NS, 3, 3NS, 4, 4NS, 5, 6, 7, 8, 9, 41, 42
Special Studies 47
Welding 1, 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 5C
Women’s Studies 5, 7, 10, 22, 24, 25, 30, 36, 41, 43, 44, 47
WorkExperience 19

Note: No more than 8 units of work experience, including both vocational and general, are considered appropriate for transfer.

TransfertoUniversityofCalifornia (UC)

Transfer Requirements of the University of California (UC)

Students ineligible for admission to the University of California at the time of high school graduation because of low grades or a combination of low grades and a lack of required subjects must meet three criteria: (1) establishment of an overall GPA of 2.4, (2) completion of 60 transfer semester units and (3) presentation of appropriate college courses completed with a “C” grade or better in the “A-F” subjects not completed in high schools. Up to two units of credit may be waived if (1) and (2) are satisfied.
An alternative to the criteria in (3) above may be used. A student may present one college course in mathematics, one in English, and one in either U.S. History, a laboratory science, or a foreign language. These courses must be passed with a grade of "C" or better. Courses other than mathematics must be transferable to the university. To meet the mathematics eligibility requirements, the student should have completed three years of high school mathematics through intermediate algebra or complete a college course with a prerequisite of intermediate algebra.

UC Transfer Admission Guarantee (Guaranteed Admission)
Fresno City College participates in guaranteed admission agreement programs with UC Davis, UC Irvine, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara, and UC Santa Cruz. These programs are designed for students who have completed 30 University of California units with a minimum grade point average of 2.8 and all will complete 60 University of California units. See a counselor or the Transfer Center for Transfer Admission Guarantee information.

University of California Transfer Course List (UC)
Fresno City College courses that are acceptable for transfer credit at the University of California are as follow.

**Accounting** 4A, 4B


*Any or all of these courses and Military Science 1, 2, 11, 12 combined: maximum credit, 8 units.

**African-American Studies** 1, 2, 3, 4, 5, 6, 8, 15, 17, 34, 41

**Allied Health** 1, 2

**American Indian Studies** 31, 32, 34, 35

**American Sign Language** 1, 2, 3, 4, 6, 7, 8, 21, 22

**American Studies** 10, 11

**Anthropology** 1, 1L, 2/2H, 3, **4, 8, 12, 13, *16A, 16B, 24, 28

*6, 16B and 24 combine: maximum credit, 2 units.

**No credit for 4 if taken after 3.

**Applied Technology** 10

**Architecture** 10, 11, 15A, 15B, 20, 30

**Armenian** 1, 2

**Art** 2, 3, 4, 5/5H, 6/6H, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24A, 24B, 24C, 24D, 25, 25A, 28, 29, 31, 36A, 52, 55, 60

**Asian-American Studies** 1, 8, 10, 15, 20, 25, 30, 55

**Astronomy** 10

**Biology** *3, 4, 5, 6, 7, 11A/11AH, 11B, 14, 20, 21A, 21B, 22, 31

*No credit for 3 if taken after 11A/11AH.

**Business Administration** 10/10H, 18, 20, 30

**Chemistry** *1A, 1B, *3A, 3B, 8A, 18L, 20, 28A, 28B, 29A, 29B

*1A and 3A combined: maximum credit, 1 course.

**Chicano-Latino Studies** 11, 12, 13, 14, 17A, 17B, 18, 20, 21, 22, 24, 27A, 27B, 28, 29, 30, 33

**Child Development** 30, 38, 39

**Chinese** 1, 2

**Communication** 1, 2, *4, 8, 12, *25

*4 and 25 combined: maximum credit, 1 course.

**Computer Information Technology** *12, *15, 40, 60, 63, 66, 70

*12 and 15 combined: maximum credit, 1 course.

**Computer Science** 1, 26, 40, 41, 45

**Counseling** 53

**Criminology** 1, 5, 6, 13


*Any or all of these PE Activity courses combined: maximum credit, 4 units.

**Decision Science** 21, *23

*23, Math 11, 42 and Psychology 42 combined: maximum credit, 1 course.

**Developmental Services** 50, 51, 52, 53, 54, 55

**Economics** 40/40H, 50/50H

**Education** 30

**Engineering** 1A, 2, 4, 5, 6, 8, 10, 12

**English** 1A/1AH, 1B, 3/3H, 12, 14, 15A, 15B, 15C, 15D, 17, 20, 36, 40, 42, 44A, 44B, 45, 46A, 46B, 47, 48A, 48B

**Film** 1, 2A, 2B, 3, 5, 6

**Food and Nutrition** 35, 40

**French** 1, 2, 3

**Geography** *1, 2, 4A, 4B, *7, 8, 10, 12, 18, 20

*1 and 7 combined: maximum credit, 1 course.

**Geology** 1, 2, 2L, 3, 4, 5, 7, 8, *9, 12

*No credit for 9 if taken after 1, 2, 2L, 3, 4, 5, 8 or ASTRO 10.

**German** 1, 2

**Global Studies** 1, 2

**Graphic Communications** 15, 16, 24A, 27, 31, 34, 39A, 40A, 41, 47

**Health Science** 1, 2, 3

**History** 1/1H, 2/2H, 3, 11, 12/12H, 15, 17, 18, 20, 21, 22, 23, 25, 29, 30, 34

**Hmong** 1, 2

**Honors Studies** *1A, *1C

#Variable topics; evaluation completed by individual campuses after admission.

*1C must be taken concurrently with PHIL 1AH, HUMAN 10H, HUMAN 11H, HIST 1H, HIST 2H, ENGL 3H, ART 5H or ART 6H for credit.
Human Services 10, 20
Humanities 10/10H, 11/11H, 42
Individual Study #49
#Variable topics; evaluation completed by individual campuses after admission.
Japanese 1, 2
Journalism 1, 16
Linguistics 10, 10H
Mathematics 4B, 5A, 5B, 6, 7, *10A, *10B, °11, 21, 26, °42, 45
*10A and 10B combined: maximum credit, 1 course.
°11, 42, Decision Science 23, and Psychology 42 combined: maximum credit, 1 course.
Military Science *1, *2, *11, *12, °50, °55, °60, °65
*Any or all of these courses and Aerospace Studies 1A, 1B, 2A, 2B, 3 combined: maximum credit, 8 units.
*No credit for 3 if taken after 1A.
Natural Science 1A
Philosophy 1A/1AH, 1B, 1C/1CH, 1D, 2/2H, 5, 6
Photography 5, 6, 12, 15, 17, 18, 23, 57
Physical Education +3-17, 20, 23, *24, 26, +27, 28, +29B-42B, +29C-44C, +43C, +45, 62, +70, +71, +72
*Any or all of these courses combined: maximum credit, 8 units.
+Any or all of these PE Activity courses combined; maximum credit, 8 units.
Physical Science °11
*No credit if taken after a college level course in Physics or Astronomy.
Physics °2A, °2B, °4A, °4B, °4C
*2A and 2B and 4A, 4B, 4C combined: maximum credit, 1 series. Deduct credit for duplication of topics.
Political Science 1, 2/2H, 3, 5, 13, 24
Portuguese 1, 2
Psychology 2/2H, 5, 16, 25, 33, 36, 38, 39, *42, 45
*42, Math 11, 42 and Decision Science 23 combined: maximum credit, 1 course.
Sociology 1A/1AH, 1B, 2, 5, 7, 10, 14, 32
Spanish 1, 2, #2NS, *3, *3NS, °4, °4NS, 5, 6, 7, 8, 9, 41, 42
#2 and 2NS combined: maximum credit, 1 course
*3 and 3NS combined: maximum credit, 1 course
°4 and 4NS combined: maximum credit, 1 course
Special Studies #47
#Variable topics; evaluation completed by individual campuses after admission.

Intersegmental General Education Transfer Curriculum (IGETC) to CSU and UC

Completion of all of the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or University of California system. The student will not be required to complete additional lower division general education courses after transfer.

It should be noted that completion of the IGETC is not a requirement for admission to the CSU or UC, nor is it the only way to fulfill the lower-division general education requirements prior to transfer. Depending on a student’s major, it may be advantageous to fulfill the CSU’s or UC’s general education requirements or those of the particular campus, school or college to which the student plans to transfer. This applies generally to high-unit majors.

The course requirements for all areas must be completed before the IGETC can be certified. All courses must be completed with grades of “C” or better.

Area 1 – English Composition
CSU—Three courses required, one each from 1A, 1B, and 1C (nine semester units minimum);
UC—Two courses required, one each from Group 1A and 1B (six semester units minimum).

1A English Composition
One course, three semester units.
**English 1A/1AH, Reading and Composition ....... 4
**1B Critical Thinking — English Composition**  
*One course, three semester units.*

- **English 3/3H, Critical Reading and Writing** ........3  
- Philosophy 2, Critical Reasoning and Analytic Writing ........................................3  
- Philosophy 2H, Honors Reasoning and Analytic Writing ......................................3  

**1C Oral Communication**  
*(CSU only: One course, three semester units)*  
- Communication 1, Intro to Public Speaking .......3  
- Communication 4, Persuasion ..........................3  
- Communication 8, Group Communication ........3  
- Communication 25, Argumentation .................3  

**Area 2 – Mathematical Concepts and Quantitative Reasoning**  
*One course required (three semester units minimum).*  
- Computer Science 26, Discrete Mathematics for Computer Science .........................4  
- Decision Science 21, Finite Mathematics ...........3  
- Decision Science 23, Business Statistics ..........4  
- Mathematics 4B, Pre-Calculus ..........................4  
- Mathematics 5A, Mathematical Analysis I ...........5  
- Mathematics 5B, Mathematical Analysis II ..........4  
- Mathematics 6, Mathematical Analysis III ...........4  
- Mathematics 10A, Structure and Concepts in Mathematics I ..................................3  
- Mathematics 10B, Structure and Concepts in Mathematics II ..................................3  
- Mathematics 11, Elementary Statistics .............4  
- Mathematics 21, Finite Mathematics .................3  
- Mathematics 26, Elementary Linear Algebra ........3  
- Mathematics 42, Statistics for the Behavioral Sciences ...........................................4  
- Psychology 42, Statistics for the Behavioral Sciences ...........................................4  

**Area 3 – Arts and Humanities**  
*At least three courses with at least one from Arts and one from Humanities (nine semester units minimum).*  

**3A Arts**  
- African-American St 3, African-American Art ..........3  
- African-American St 15, African-American Music .................................................3  
- American Indian St 35, American Indian Art ..........3  
- Asian American St 55, Introduction to Asian Art .....................................................3  
- Architecture 15B, History of Architecture II ........3  
- Art 2, Art Appreciation ......................................3  
- **Art 5/5H, Art History Ancient to Medieval** ........3  
- **Art 6/6H, Art History Renaissance to Modern** ....3  
- Art 55, Introduction to Asian Art ......................3  
- Art 60, Art of the Ancient Americas ..................3  
- Chicano-Latino St 20, Chicano Art ....................3  
- Chicano-Latino St 22, Art of the Ancient Americas ....3  
- Dance 30, Dance Appreciation .........................3  
- Film 6, Film Genres .........................................3  
- **Music 3, Music Fundamentals** ......................3  
- Music 12, Music Appreciation .........................3  
- Music 13, History of Music .............................3  
- Music 16, Jazz History and Appreciation ............3  
- Music 17, History of Rock ...............................3  
- Theatre Arts 30, Theatre Appreciation ...............3  
- Theatre Arts 31, Theatre History and Dramatic Literature I ....................................3  
- Theatre Arts 32, Theatre History and Dramatic Literature II ..................................3  

**3B Humanities**  
- African-American St 17, African-American Literature .............................................3  
- American Sign Language 2, High-Beginning American Sign Language .........................4  
- American Sign Language 3, 4, Intermediate American Sign Language ......................4-4  
- American Sign Language 7, Deaf History ..........3  
- American Sign Language 8, American Sign Language/Folklore ..................................3  
- Armenian 2, High-Beginning Armenian .............5  
- Asian-American Studies 8, Chinese Culture ........3  
- Chicano-Latino St 21, Chicano Literature ..........3  
- Chinese 2, High-Beginning Chinese .................5  
- **English 1B, Introduction to the Study of Literature** .............................................3  
- English 12, The Bible as Literature ..................3  
- English 14, Folklore .......................................3  
- English 17, African-American Literature ..........3  
- English 36, Women's Literature ......................3  
- English 42, Classic Myths ...............................3  
- English 44A, World Literature to the Renaissance ......................................................3  
- English 44B, World Literature Since the Renaissance ...................................................3  
- English 45, Contemporary World Literature ........3  
- English 46A, English Literature to 1800 .............3  
- English 46B, English Literature from 1800 to the Present ........................................3  
- English 47, Introduction to Shakespeare ..........3  
- English 48A, Introduction to American Literature to 1865 ....................................3  
- English 48B, Introduction to American Literature from 1865 to the Present .................3  
- Film 1, Introduction to Film Studies ..................3
### 54 Transfer Information and Requirements

CSU-transferable

#### 4A Anthropology and Archaeology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td><strong>Anthropology 2/2H, Cultural Anthropology</strong></td>
<td>3</td>
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</tr>
<tr>
<td><strong>Anthropology 3, Archaeology and World Prehistory</strong></td>
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<td>Anthropology 4, Introduction to Archaeology</td>
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<td>Anthropology 8, Language and Culture</td>
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<td>Anthropology 12, Visual Anthropology: Introduction to Ethnographic Film</td>
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#### 4B Economics

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<tr>
<td><strong>Economics 50/50H, Introduction to Macroeconomics</strong></td>
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#### 4C Ethnic Studies

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<td>African-American St 1, Introduction to African American Studies</td>
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<tr>
<td>African-American St 34, History of the American Civil Rights Movement</td>
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<td>American Indian St 20, Native People of California</td>
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<td>American Indian St 31, American Indian Culture</td>
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<td>American Indian St 34, American Indian in Contemporary Society</td>
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<td>Asian-American St 1, Indo-Chinese Americans</td>
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<td>Asian-American St 10, Hmong Culture</td>
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<td>Asian-American St 15, Introduction to Asian-Americans</td>
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<td>Asian-American St 25, Asian American Social Issues</td>
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<td>Chicano-Latino St 11, Introduction to Chicano-Latino Studies</td>
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<td>Chicano-Latino St 12, Mexican American History</td>
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<tr>
<td>History 34, History of the American Civil Rights Movement</td>
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<td>Journalism 16, Race, Gender and the Media</td>
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<td>Women's Studies 30, Asian-American Women</td>
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#### 4D Gender Studies

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<td>History 22, History of American Women</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Journalism 16, Race, Gender and the Media</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Women's St 10, Changing Roles of Women</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Women's Studies 47, Introduction to Lesbian and Gay Studies</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### 4E Geography

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography 2, Cultural Geography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Geography 4A, 4B, World Geography</td>
<td>3-3</td>
<td></td>
</tr>
<tr>
<td>Geography 20, Geography of California</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### 4F History

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American St 4, Classical and Pre Colonial Africa</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>African-American St 34, History of the American Civil Rights Movement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chicano-Latino St 29, History of Mexico, Colonial to Contemporary Period</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Area 4 – Social and Behavioral Sciences**

At least three courses from at least two different disciplines (nine semester units minimum).
History 3, History of Ancient Rome..............3
History 11, History of the United States to 1877 ..........................................................3
History 12/12H, History of the United States Since 1877.................................................3
History 15, History of the British Isles ..........3
History 17, History of the Muslim World to 1405 ...............................................................3
History 18, History of Ancient Greece ..........3
History 20, World History I, to 1600 ..........3
History 21, United States Civil War..............3
History 22, History of American Women ....3
History 23, World History II, since 1500 ..3
History 25, History of Religion in the United States............................................................3
History 29, History of Mexico, Colonial to Contemporary Period ........................................3
History 30, California History ....................3
History 34, History of the American Civil Rights Movement ...............................................3
Women's Studies 22, History of American Women ...............................................................3
Women’s Studies 30, Asian-American Women .......................................................................3

4G  Interdisciplinary, Social & Behavioral Sciences
American St 10, American Pluralism:
A Search for Common Ground in a Multicultural Society .................................................3
Chicano-Latino St 30, Migration and the Family: Social and Psychological Perspectives ..........3
Child Development 30, Child, Family, and Community .........................................................3
Child Development 39, Child Growth and Development .......................................................3
Global Studies 1, Introduction to Global Studies .................................................................3
Global Studies 2, Global Issues ......................3
Journalism 1, Introduction to Mass Communication ............................................................3
Psychology 39, Child Growth and Development .................................................................3

4H  Political Science, Government & Legal Institutions
American St 11, Law and Democracy ..........3
Political Science 1, Modern Politics ..........3
**Political Science 2/2H, American Government .................................................................3
Political Science 3, Introduction to Political Theory and Thought .........................................3

Political Science 5, Comparative
Government ..............................................3
Political Science 24, International Relations ....3

4I  Psychology
Child Development 38, Lifespan Development .......................................................................3
Child Development 39, Child Growth and Development .......................................................3
**Psychology 2/2H, General Psychology ........3
Psychology 38, Lifespan Development ........3
Psychology 39, Child Growth and Development .................................................................3

4J  Sociology & Criminology
Human Services 10, Introduction to Aging Studies ..............................................................3
Sociology 1A/1AH, Intro to Sociology ..........3
Sociology 2, American Minority Groups ....3
Sociology 10, Introduction to Aging Studies ....3

Area 5 – Physical and Biological Sciences
At least two courses, one Physical Science and one Biological Science (seven to nine semester units minimum). One course must have a lab component (indicated by "L").

5A  Physical Sciences
Astronomy 10(L), Basic Astronomy ..........3
**Chemistry 1A(L), 1B(L), General Chemistry ..................................................................5-5
**Chemistry 3A(L), Intro General Chemistry ....4
Chemistry 8A, Elementary Organic Chemistry ..........3
Chemistry 28A/29A(L), Organic Chemistry I ....................................................................3-2
Chemistry 28B/29B(L), Organic Chemistry II .................................................................3-2
**Geography 1(L), Physical Geography ........3
**Geography 7(L), Physical Geography - Earth Surface ......................................................4
Geography 8(L), Physical Geography - Weather/Climate ..................................................4
Geology 1(L), Physical Geology .................4
Geology 2, Historical Geology ....................3
Geology 4, Geology of California .................3
Geology 5, Introduction to Oceanography ..........3
Geology 7, Natural History of Dinosaurs .......3
Geology 8, Geology of Moons and Planets ....3
Geology 12, Environmental Science ..........3
**Physical Science 11, Intro Physical Science ..3
**Physics 2A(L), General Physics 1 ..........4
**Physics 2B(L), General Physics 2 ...............4
**Physics 4A(L), 4B(L), 4C(L), Physics for Scientists and Engineers ................................4-4-4
<table>
<thead>
<tr>
<th>Area 6 – UC Requirement in Language Other than English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficiency equivalent to two years of high school study in the same language with &quot;C&quot; or better grades (at Fresno City College one course required if not met by high school foreign language).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Sign Language 1, Beginning American Sign Language</td>
<td>3</td>
</tr>
<tr>
<td>American Sign Language 2, High-Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>American Sign Language 3, Intermediate American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>American Sign Language 4, High-Intermediate American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>Armenian 1, Beginning Armenian</td>
<td>5</td>
</tr>
<tr>
<td>Armenian 2, High-Beginning Armenian</td>
<td>5</td>
</tr>
<tr>
<td>Chinese 1, Beginning Chinese</td>
<td>5</td>
</tr>
<tr>
<td>Chinese 2, High-Beginning Chinese</td>
<td>5</td>
</tr>
<tr>
<td>French 1, Beginning French</td>
<td>5</td>
</tr>
<tr>
<td>French 2, High-Beginning French</td>
<td>5</td>
</tr>
<tr>
<td>French 3, Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>German 1, Beginning German</td>
<td>5</td>
</tr>
<tr>
<td>German 2, High-Beginning German</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hmong 1, Beginning Hmong</td>
<td>5</td>
</tr>
<tr>
<td>Hmong 2, High-Intermediate Hmong</td>
<td>5</td>
</tr>
<tr>
<td>Japanese 1, Beginning Japanese</td>
<td>5</td>
</tr>
<tr>
<td>Japanese 2, High-Beginning Japanese</td>
<td>5</td>
</tr>
<tr>
<td>Portuguese 1, Beginning Portuguese</td>
<td>5</td>
</tr>
<tr>
<td>Portuguese 2, High-Beginning Portuguese</td>
<td>5</td>
</tr>
<tr>
<td>Spanish 1, Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>Spanish 2, High-Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td><strong>Spanish 3, Intermediate Spanish</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Spanish 3NS, Intermediate Spanish for Spanish Speakers</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Spanish 4, High-Intermediate Spanish</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Spanish 4NS, High-Intermediate Spanish for Spanish Speakers</strong></td>
<td>5</td>
</tr>
<tr>
<td>Spanish 7, Advanced Spanish: Composition and Grammar</td>
<td>4</td>
</tr>
</tbody>
</table>

**Notes:**

1. Courses may be listed in more than one area, but can be certified in only one area except for courses in Languages other than English, which can be certified in both areas 3B and 6A.

2. ** Indicates that transfer credit may be limited by either UC or CSU or both. Please consult with a counselor for additional information.

3. All courses listed for IGETC are approved for CSU GE and are transferable to UC.

4. Advanced Placement credit: Exam scores of 3, 4 or 5 can be used to meet IGETC subject areas and English Composition but not Critical Thinking.

5. This pattern should not be used for the following majors at the University of California campuses listed. It either will not be accepted or contains more courses than are required. Use the GE-Breadth requirement for the individual program in the campus catalog. It is critical for admission that students complete all lower division major preparation in addition to the GE-Breadth requirement selected.
The following information is taken from the University of California's website at www.universityofcalifornia.edu.

U.C. Berkeley

Colleges of Chemistry and Engineering
In general, IGETC is not appropriate.

College of Environmental Design
IGETC is acceptable with full certification to fulfill CED’s breadth requirements.

College of Letters and Science
Either IGETC or the college’s requirements are acceptable.

College of Natural Resources
IGETC is acceptable; however, specific lower division major requirements must still be satisfied.

Haas School of Business
IGETC is not accepted.

U.C. Davis
All undergraduate colleges accept IGETC. However, Bachelor of Science degrees and high-unit majors often have many courses for lower-division preparation. In these cases, IGETC is not recommended and the UC Davis general education pattern is a better choice.

U.C. Irvine
All schools accept IGETC. However, selection by the campus is based on demonstrated academic achievement and preparation for the intended major.

U.C. Los Angeles
The Henry Samueli School of Engineering and Applied Science does not accept IGETC.

U.C. Merced
School of Engineering and School of Natural Sciences
IGETC is not recommended.

School of Social Science, Humanities, and Arts
IGETC is recommended, and students are encouraged to complete as much lower-division major preparation as possible prior to transfer.

U.C. Riverside
College of Humanities, Arts and Social Sciences
IGETC is recommended.

College of Natural and Agricultural Sciences
IGETC is not accepted.

The Marlan and Rosemary Bourns College of Engineering
IGETC is accepted; some additional coursework may be required after enrollment.

School of Business Administration
IGETC is required.

U.C. San Diego
IGETC is accepted by John Muir, Earl Warren, Sixth and Thurgood Marshall colleges only.

Eleanor Roosevelt and Revelle Colleges
IGETC is accepted; some additional coursework may be required after enrollment.

U.C. Santa Barbara
College of Creative Studies and College of Letters and Science
IGETC is accepted.

College of Engineering
Students are encouraged to focus on major preparation rather than general education. IGETC may be used to substitute for most general education requirements. However, some additional coursework may be required after enrollment to complete the depth requirement if not satisfied during IGETC certification.

U.C. Santa Cruz
For majors in the physical and biological sciences or the Jack Baskin School of Engineering, IGETC is not recommended. Students should ensure completion of lower-division courses for their intended majors.

Transfer Requirements of Private/Independent and Out-of-State Colleges and Universities
Transfer requirements of the private/independent and out-of-state colleges and universities differ from one institution to another. Students should acquaint themselves with the current catalog of the college to which they plan to transfer for admission, general education, and major preparation information. It is up to the receiving institution to determine application of credit. The Fresno City College Transfer Center has a library of catalogs for student use as well as computers with Internet access for college websites and catalogs online. See a counselor for assistance.
Administrative Policies

Student Conduct Standards

Students are expected to conduct themselves as responsible citizens whenever they are on the campus or representing Fresno City College in any activity. The Board of Trustees has adopted specific rules and regulations governing student behavior along with applicable penalties for violations. The student conduct standards and discipline policy (Board Policy No. 5500) is cited below, and students consequently are held responsible for familiarizing themselves with these rules and regulations (Education Code 66300). All campus activities must have the prior approval of the administration of the college.

State Center Community College District (SCCCD) Policy Statement

Once a student enrolls in courses on a campus of the State Center Community College District, that individual accepts both the rights and responsibilities associated with that enrollment. The State Center Community College District exists to educate individuals in our community. All other considerations are secondary. The district will not infringe on anyone’s constitutional rights and the right to dissent and to protest. However, the right to dissent and to protest must not be construed as a right to disrupt operation of the institution. No individual or group can be permitted to infringe on the rights of others to secure an education.

These conduct standards, and Administrative Regulation 5520 which defines discipline procedures, apply to all students who are enrolled in courses offered by either college of the State Center Community College District. Any student will be subject to discipline who, in any way:
1. prevents other students from pursuing their authorized curricular or co-curricular interests;
2. interferes with or disrupts faculty and administrators who are fulfilling their professional responsibilities;
3. prevents classified employees from fulfilling their prescribed duties;
4. disrupts presentations by authorized guests; or
5. deliberately endangers the safety of persons, or the security of college property.

Student Assembly

In accordance with state law, the district recognizes the right of peaceful assembly and will make facilities available for recognized staff and student groups when such assembly does not obstruct free movement of persons about the campus, the normal use of classroom buildings and facilities, and normal operations of the college or the instructional program, and when it does not jeopardize the safety of persons, lead to the destruction of property, or violate the laws of the district, state or nation. Persons who are not members of the student body or the college and who violate this policy shall be subject to the control of public authorities.

Exercise of Free Expression

In stating its policy on the distribution of materials, the governing board of this district has assumed that each student is responsible for their actions individually, even when acting as a member of an organization, and that no student, by following district or college policies, regulations or procedures, escapes individual responsibility for observing laws relating to such matters as libel, copyright violation, and obscenity.

Bulletins, circulars, publications, or articles of any character prepared by a student currently enrolled in an institution of this district, or by a campus organization officially recognized by a college of this district may be distributed on a college campus of this district only when such distribution is in accordance with established regulations.

With the exception of publications and materials sold or circulated by offices or agencies of this district and of district colleges, all publications and materials to be circulated on campuses of the district shall be subject to the foregoing policy provisions.

This policy is not intended to limit the use of sectarian, partisan, or denominational materials for legitimate library and classroom use.
Student Protests and Demonstrations
The students, faculty, and administration of the community college district are expected to respect the rights of the minority just as much as they respect those of the majority. Every individual, operating within the law, is guaranteed the basic freedom to participate in demonstrations or protests as long as they do not interfere with the primary focus of the college — education. Picketing, demonstrations, or other forms of protest are not to be carried on so as to interfere with instructional activities or the normal flow of student traffic in and out of buildings.

Each college has the right to make and enforce reasonable regulations relating to the time, place, and manner of the exercise of these rights, in order to prevent interference with college programs and services.

Student Publications
Student publications are a valuable aid in establishing and maintaining an atmosphere of free and responsible discussion and in intellectual exploration. They serve as a means of bringing student concerns to the attention of the college community and the public and of formulating student opinion on various issues.

The editorial freedom of student editors and managers entails corresponding responsibilities to be governed by the canons of responsible journalism such as the avoidance of libel, indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo. As safeguards for the editorial freedom of student publications, the following provisions shall apply:

1. Editors and managers of student publications shall be protected from arbitrary suspension and be removed only for proper cause through orderly procedures.
2. All college published and financed student publications shall state explicitly on the editorial page that the opinions there expressed are not necessarily those of the college or the student body.

Computer/Network Equipment Use Policy
Every State Center Community College District (SCCCD) student is permitted to use a District-owned computer/network. As a condition of this use, each student agrees to:

- use the computer/network for educational purposes only and not for any commercial purpose or financial gain;
- use the computer and software in an ethical manner; this means the student will respect the security of the District's computer system and will not illegally gain access to any network, hardware or software;
- not take or copy any copyrighted or patented software or any part of such software; further, the student agrees not to install/uninstall any program or software, including shareware programs, on the computer;
- not use the electronic mail system for any illegal or illicit purpose, including solicitation; the District reserves the right to monitor all computer activities on its computers; the student agrees to abide by the rules of any other computer system that they may contact through the Internet;
- not transmit any communication in which the meaning of the message or its transmission or distribution would violate any applicable law or regulation or be offensive to the recipient or recipients; and
- not search, view or download pornographic material through any means.

It is understood that information, programs or data a student obtains from the Internet are used at their own risk. The student is responsible for any damage caused by malicious programs, commonly known as viruses, received from the Internet.

Each student is expected to abide by the District’s Acceptable Use Policy (http://www.scccd.edu/departments/information-systems/scccd-use-policy.html). The District is the sole determiner of the interpretation and application of the Acceptable Use Policy. It is understood that if a student violates any of the above rules, they are subject to removal from the computer facility as well as discipline as a student.

Tobacco-Free Campus
Fresno City College is a tobacco-free campus. In order to provide a healthier environment for students, faculty, staff and visitors the State Center Community College District Board of Trustees adopted a new policy on June 4, 2019 that prohibits the use of smoking, vaping and any tobacco use on campus. This comes following the adoption of a new resolution by the California Community College Board of Governors in 2018.

Drug Abuse Policy
For the protection of other students in the State Center Community College District, the Governing Board of this District may suspend or expel, and the Chancellor of this District is authorized to suspend a student whenever it is established to the satisfaction of the Board or the Chancellor, as the case may be, that the student has on college premises used, sold or been in possession of narcotic or other hallucinogenic drugs or substances, or has on college premises inhaled, or breathed the fumes of, or ingested any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code.
Academic Freedom

General Principles

The State Center Community College District is unequivocally and unalterably committed to the principle of academic freedom in its true sense which includes freedom to study, freedom to learn and freedom to teach and provide educational professional services to students.

Academic freedom encompasses the right of an instructor to discuss pertinent subjects within his or her field of professional competency in the classroom, consistent with course objectives, and for counselors, librarians and other academic employees to provide appropriate student services within their fields of professional competency and consistent with sound educational principles.

Neither District officials nor outside individuals or groups may interfere with or censure an academic employee because of the employee’s proper treatment of pertinent subjects, or provision of proper educational professional services to students is precluded by the principle of academic freedom.

Faculty must, however, accept the responsibility that accompanies academic freedom. The right to exercise any liberty implies a duty to use it responsibly. Academic freedom does not give faculty freedom to engage in indoctrination. Nor can faculty invoke the principle of academic freedom to justify non-professional conduct.

An essential point that pertains to academic freedom and that must be considered in relation to subject matter or to professional services to the student is the criterion of suitability. The subject matter, material to be studied, or educational professional services to the student must contribute to the attainment of course objectives or achievement of an educational principle.

The special interests of faculty or the opinion of a person or persons in a class should not supersede the right of other students to be protected against irrelevant or obscene materials or presentations.

Academic Dishonesty

Students at Fresno City College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another’s work, supplying one’s work to another, giving or receiving copies of examinations without an instructor’s permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism

Plagiarism is a specific form of cheating and is the use of another’s words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or encouraging, permitting, or assisting another to do any act that could subject him or her to discipline.

Incidents of cheating and plagiarism may result in a variety of sanctions and penalties that may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Authority and Disciplinary Actions

A student enrolled in courses offered by any college or center of the State Center Community College District assumes an obligation to conduct him/herself in a manner compatible with the college’s function as an educational institution. A student may be disciplined, utilizing the procedures set out in Administrative Regulation 5520, for any of the following causes which must be related to college attendance or activity:
1. Causing, attempting to cause, or threatening to cause physical injury to another person.

2. Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from the Vice President of Student Services.

3. Unlawful possession, use, sale, offering to sell or furnish, furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Section 11053 et seq., an alcoholic beverage, or an intoxicant of any kind or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia as defined in California Health and Safety Code Section 11014.5.

4. Committing or attempting to commit robbery or extortion, or gambling.

5. Causing or attempting to cause damage to District property or to private property on campus. Stealing or attempting to steal District property or private property on campus or knowingly receiving stolen District property or private property on campus.

6. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or the District.

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

8. Engaging in harassing or discriminatory behavior based on race, sex, religion, age, national origin, disability, or any other status protected by law.

9. Willful misconduct that results in injury or death to a student or to District personnel or which results in cutting, defacing, or other damage to any real or personal property owned by the District or on campus.

10. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, the open and persistent defiance of the authority of, or persistent abuse of, college personnel.

11. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty as defined by the Office of Instruction.

12. Dishonesty, forgery, alteration or misuse of District documents, records or identification, or knowingly furnishing false information to the District.

13. Unauthorized entry upon or use of District facilities.

14. Lewd, indecent, or obscene conduct, or expression on District-owned or controlled property, or at District sponsored or supervised functions.

15. Engaging in expression which is obscene, libelous, or slanderous or which so incites students as to create a clear and present danger of the commission of unlawful acts on District premises.

16. Violation of lawful District regulations or the substantial disruption of the orderly operation of the District.

17. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.

18. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to digital or electronic recording or handwritten or typewritten class notes except as permitted by any District policy or administrative procedure.

19. Other good cause as shown.

Students are responsible for their conduct, and failure to adhere to accepted standards will result in disciplinary action. Instructors shall be in charge of their classes, and students are under obligation to respect the authority of each instructor.

Fresno City College reserves the right to exclude at any time a student who, in the judgment of the administration, is not taking proper advantage of the opportunities offered.

**Student Rights**

Student rights are protected by federal and state laws, and by policies established by the trustees of the State Center Community College District. It is therefore essential for the protection of students’ rights that procedures be established and followed that would identify violations of student conduct standards and the resolutions of such violations. Students have a right to an oral or written notice (reasons for disciplinary action), an opportunity for a review, and a decision given orally or in writing. For more information, contact the Vice President of Student Services Office.

**Removal from Class by Instructor**

Fresno City College’s Student Code of Conduct Policy (Board Policy 5500) authorizes an instructor to remove a disruptive student from his or her class for the day of the removal and the next class meeting. The instructor shall immediately report the removal to the Vice President of Student Services. During the period of removal, a student shall not be returned to the class from which he or she was removed without the concurrence of the instructor of the class.
Grievance Policy for Students

Students who reasonably believe a college decision or action has adversely affected his or her status, rights, or privileges may file a student grievance form and submit it to the Office of the Vice President of Student Services Office. This policy applies to complaints of discrimination and harassment. Students are expected to make a reasonable effort to resolve matters informally with either the person whom the student has a grievance and then that person’s supervisor or a college administrator, if necessary. Students have a right to file a grievance alleging discrimination and harassment whether or not they have attempted to resolve the matter informally with the accused party. All complaints are investigated. Student grievance forms are located in the Office of the Vice President of Student Services.

Inquiries regarding the equal opportunity policies, the filing of grievances, or to request a copy of the grievance procedures covering discrimination complaints may be directed to the Section 504/Title II compliance coordinator:
Vice President of Student Services
Fresno City College
1101 E. University Avenue Fresno, CA 93741
(559) 442-4600, Ext. 8595

For complete details on the college policies regarding discrimination and harassment complaints, refer to Administrative Regulation 3435 on the State Center Community College District website at www.scccd.edu.

Rights and Responsibilities

Open Enrollment

It is the policy of this District that, unless specifically exempted by statute or regulation, every course, section, or class, 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 and who meets such prerequisites as may be established pursuant to Title 5 of the California Code of Regulations.

Student Enrollment Responsibilities

It is the responsibility of all students to be aware of and observe all college policies regarding class enrollment and attendance, including dropping classes.

Parking Regulations

Student vehicles must display a State Center Community College District parking permit to park in campus parking lots.

Students are required to observe parking regulations with regard to red no-parking zones, private driveways, double parking, handicapped zones, restricted lots, etc., and are reminded that parking in these areas could result in a citation or the vehicle being towed away at the student’s expense.

The State Center Community College District Police Department will strictly enforce these regulations. Students are advised to arrive early enough for their first class to allow time for them to obtain a parking space, which may be some distance from the classroom, and to arrive in the classroom on time.

Students may pick up a copy of the complete parking regulations at Campus Police, Calaveras and Weldon, or at the College Business Office, Old Administration Building, room 151.

Statement of Nondiscriminatory Policy and Obligations

Fresno City College does not discriminate on the basis of race, color, national origin, sex, disability, age, or sexual orientation in any of its policies, procedures, or practices, in compliance with Title VI of the Civil Rights Act of 1964 (pertaining to race, color, and national origin), Title IX of the Education Amendments of 1972 (pertaining to sex), Section 504 of the Rehabilitation Act of 1973 (pertaining to handicap), the Americans with Disabilities Act and the Age Discrimination Act of 1975 (pertaining to age) and California State Law. This nondiscrimination policy covers admission and access to, and treatment and employment in, the college’s programs and activities, including vocational education. Inquiries regarding the equal opportunity policies, the filing of grievances, or to request a copy of the grievance procedures covering discrimination complaints may be directed to:

Vice President of Student Services
Fresno City College
1101 E. University Avenue
Fresno, CA 93741
(559) 442-4600, ext. 8595

The college recognizes its obligation to provide overall program accessibility throughout the college for handicapped persons. Contact Vice President of Student Services to obtain information as to the existence and location of services, activities and facilities that are accessible to and usable by handicapped persons.

The lack of English language skills will not be a barrier to admission and participation in the college’s vocational education programs.
Inquiries regarding Federal laws and regulations concerning nondiscrimination in education or the District’s compliance with those provisions may also be directed to:

Office for Civil Rights
U.S. Department of Education
221 Main Street, Suite 1020
San Francisco, CA 94105

Las preguntas con respecto a las leyes Federales y reglamentos en referencia a la no-discriminación en la educación, o el cumplimiento del Distrito en dichas previsiones pueden dirigirse también a:

Oficina de los Derechos Civiles
Departamento de Educación de E.U.
221 Main Street, Suite 1020
San Francisco, CA 94105

Declaración: Póliza de la No-Discriminación y las Obligaciones

Fresno City College no discrimina en base a raza, color, nacionalidad de origen, discapacidad, edad u orientación sexual en cualquiera de sus políticas, procedimientos o prácticas, en cumplimiento con el Título VI de la Ley de Derechos Civiles de 1964 (referente a la raza, color y nacionalidad de origen), Título IX de las Enmiendas de Educación de 1972 (referentes al sexo), Sección 504 de la Ley de Rehabilitation de 1973 (referente a la discapacidad), la Ley de Americanos con Discapacidades y la Ley de Discriminación por Edad de 1975 (referente a la edad) y la Ley Estatal de California. Esta política de no-discriminación cubre la admisión y acceso a, y tratamiento y empleo de los programas y actividades de Fresno City College, incluyendo la educación vocacional. Puede solicitar información con respecto a las políticas de igualdad de oportunidades, poner una queja o solicitar una copia del procedimiento para quejas concernientes a discriminación dirigiéndose a:

Vicepresidente de Estudiantes
Fresno City College
1101 E. University Avenue
Fresno, CA 93741
(559) 442-4600, ext. 8595

Tsab Cai Tsis Pub Muaj Kev Ntxub-ntxaug Thiab Tej Uas Yuav Tsum Tau Ua

Fresno City College yuav tsis pub muaj kev ntxub ntxaug rau tej kev sib baww ntawm haiv neeg, ntawm nqaij-tawv, tuaq baww tej chaws tuaj, poj-niam, txiv-neej, neeg xiam oob khab, laus-hluas, los yog qhov kev xaiv ntawm tej kev nkauj nraug li cas nyob rau hauv nws txoj cai, kev khaiv dej-num, los yog kev coj, kom raws li txoj cai Title VI ntawm Civil Rights Act ntawm 1964 (uas hais txog ntawm haiv neeg, nqaij-tawv, thiab tuaj baww teb chaws tuaj), Title IX ntawm qhov Education Amendments ntawm xyoo 1972 (hais txog poj niam-txiv neej), Section 504 ntawm Rehabilitation Act ntawm xyoo 1973 (hais txog neeg xiam oob khab), qhov Americans with Disability Act thib qhov Age Discrimination Act ntawm xyoo 1975 (hais txog laus-hluas), thib Xeev California Txoj Cai. Tsab cai tsis pub muaj kev ntxub-ntxaug no muaj vaj-huam sib luag thiab ncaj ncees rau kev tuaj nkag kawm ntaw thiaw kev ua hauj-lwm nyob hauv college tej programs thiab lwm yam rau txhua tus, nrog rau kev kawm hauj lwm nyob hauv tsev kawm ntaww. Yog xav paub bong boj cai vaj-huam sib luag no, muaj kev tsis baux siab los sis xav tau ib daim ntaww qhia txog boj cai ntawm kev tawm suab bong tej kev tsis baux siab thaum raug neeg nbxb nbxaug ntawd no, mus cuag tau rau:

Vice President of Student Services
Fresno City College
1101 E. University Avenue
Fresno, CA 93741
(559) 442-4600, ext. 8595
Lub tsev kawm ntawv paub bxog nws lub luag dej num hais tias yuav tsum taw muaj program nyob thoob plaws hauv tsev kawm ntawv rau cov neeg xiam oob khab. Hu rau Dean of Students, rau tej kev pab thib tej chaw pab, uas muaj rau cov neeg xiam oob khab.

Tus ho tis paub lus As-kiv zoo los yeej tis muaj teeb meem li cas rau nws tuaj mus kawm ntawv thiab kawm hauj Iwm nyob rau hauv tsev kawm ntawv qhov siab no li.

Yog xav paub bxog Tsoom Fwv tej cai tswj bxog qhov tis pub muaj kev ntxub-ntxaug nyob rau hauv tej tsev kawm ntawv los yog saib lub District ntawd puas ua raws li txoj cai, mus cuag tau rau:

Office for Civil Rights
U.S. Department of Education
221 Main Street, Suite 1020
San Francisco, CA 94105

Family Education Rights and Privacy Act (California State and Federal Legislation)

The Family Education and Privacy Act outlines certain rights students have concerning access to and release of their educational records. A comprehensive District policy outlining these rights is available from the Admissions and Records Office. Each student is encouraged to obtain a copy.

Briefly, the Act ensures that the students will have access to their educational records, that the college will not release their records to anyone who is not designated by the student to receive them, except as provided in the law itself.

The law authorizes the release of directory information in the absence of student objection. Directory information is defined in District AR 5040. Objection, if any, to the release of this information may be made known in writing by filing the proper form at the Admissions and Records Office. Such objection shall be in force until changed by the student.

Sexual Harassment Policy

It is the policy of the governing board of the State Center Community College District that no person shall, on the basis of ethnic group identification, national origin, religion, age, sex, race, color, physical or mental disability, or sexual orientation be subjected to unlawful discrimination in any program or activity of the district. It is further the policy of the governing board that the district shall maintain a working and learning environment free from sexual harassment of its students, employees, and those who apply for student or employee status. All students and employees should be aware that all institutions of the district are concerned and will take action to eliminate sexual harassment. Engaging in sexual harassment is conduct which may subject the harasser to disciplinary action.

Harassment on the basis of sex is a violation of State and Federal Law.

Sexual harassment means unwelcome sexual advances, requests for sexual favors and other verbal, visual, or physical conduct of a sexual nature, made by someone from or in the work or educational setting, under any of the following conditions:

- a. Submission to the conduct is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress.
- b. Submission to, or rejection of, the conduct by the individual is used as the basis of employment or academic decisions affecting the individual.
- c. The conduct has the purpose or effect of having negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile, or offensive work or educational environment.
- d. Submission to, or rejection of, the conduct by the individual is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the educational institution.

Complaints of sexual harassment should be processed according to the terms of District Administrative Regulation 3435.

A copy of the District sexual harassment policy and complaint procedures may be obtained from the Vice President of Student Services, Student Services Building, upper level.

Change of Address, Telephone Number

Students who have a change of address or telephone number are required to officially notify the college by clicking “Address, Email and Phone Update” on WebAdvisor.

Other Policies

Additional policies are included in the State Center Community College District policy manual. Manuals are on file and may be consulted in the Fresno City College Library, and the offices of the President, the Vice President of Instruction, the Vice President of Student Services, and the Vice President of Administrative Services.
STUDENT SUPPORT SERVICES

Fresno City College is a community college that cares about students’ success. As a FCC student, you will find a host of services to help you succeed, as well as friendly staff to provide assistance as you pursue your community college education.

Bookstore

The Fresno City College Bookstore is operated for the convenience of Fresno City College students. The store carries student supplies, textbooks and other articles of interest to the college community. For business hours please refer to the Bookstore’s website at www.bookstore.fresnocitycollege.edu.

Return and Refund Policy

1. When returning merchandise, students must present their original cash register receipt with the correct dollar amount along with a photo ID. No refund will be given without it. Students have 5 working days from the date on the receipt to return textbooks and 30 days for returnable non-textbook items.

2. All sales are final on scantrons, tradebooks/novels and study aids. Various electronics, software and access codes are non-refundable if opened. Access codes that are exposed are also non-refundable.

3. A full refund is only given when a class has been canceled by the College and textbook(s) returned are in the same condition as initially bought. In all other cases, there is a 10% handling/restocking charge.

4. Textbook condition: New and used textbooks must be returned in salable condition. Any books damaged by liquids are not returnable. New textbooks must be clean, free of all marks, creases and erasures. If not, the books will be considered “used” and may be refunded at the used price. Wrapped, loose-leaf textbooks, e-books, books with exposed or open access codes and boxed merchandise are non-refundable once opened. Used textbooks are sold “as is.” Because these books have been used by other customers prior to sale, the Bookstore cannot guarantee their life expectancy.

5. The bookstore reserves the right to make the decision on the condition or saleability of all returned merchandise.

6. Refunds will be issued in the same manner as paid (if paid with a credit/debit card — refund will be made back to credit/debit card).

7. No refunds on textbooks will be given the last four weeks of instruction of any term which includes summer sessions.

The bookstore accepts cash, VISA, MasterCard, Discover Card and American Express. Textbooks can be ordered online at www.bookstore.fresnocitycollege.edu. Shipments can be picked up at the FCC bookstore or delivered to a stated address. For further information, call (559) 442-8261.

CalWORKs

The CalWORKs office, located in the Applied Technology 200 building, is a joint venture between the college and the Fresno County Department of Social Services (DSS). Both college and DSS personnel staff the center.

The program provides an array of services to those eligible to participate in the CalWORKs program. Some of the benefits may include:

- financial assistance with child care, transportation, and books
- academic advising, personal and career counseling
- referral for supportive services
- CalWORKs Work Study
- provision of initial school supplies

If you are interested in the CalWORKs program or want to inquire about eligibility for CalWORKs benefits, call (559) 442-8286.
The Fresno City College Athletic Department offers 21 intercollegiate teams for both men and women. The FCC Rams have a rich and successful history that includes numerous conference and regional titles along with state championships in several sports.

Child Development Center

The Child Development Center is an integral part of the Child Development Department of Fresno City College. The Center serves as a resource for Fresno City College students to receive professional training and observe children in a quality program. Located on campus at 1621 East University Avenue, to the west of Blackstone Avenue, the Center is open 7:00 a.m. to 5:30 p.m. Monday-Friday. It is open year round and closed for most holidays. The Child Development Center offers childcare services for students, faculty, staff, and community members as space allows. It is a licensed, NAEYC accredited center for children ages two through five. Please access the Child Development Center webpage via the FCC website (www.fresnocitycollege.edu), and click the Child Development Center link for enrollment and other information.

College Relations

Community outreach services are coordinated through the College Relations office. College Relations specialists regularly visit high schools, businesses and community agencies to advise prospective students regarding college planning. Call (559) 442-8225 for more information.

Counseling Department

Fresno City College is committed to providing a professional counseling staff, a requirement under California Education Code, Title 5.

Fresno City College counselors meet with students on an individual or small group basis for a range of purposes: developing a Student Education Plan (SEP), interpreting assessment results, recommending further assessment/testing, determining specific course selection for immediate and future registration, identifying students’ concerns and making appropriate referrals for services, and supporting the progress and successful achievement of the student’s goal through follow-up services. Personal and social concerns are also addressed as they relate to college success. Students are encouraged to take advantage of these services offered at no cost.

Counselors also teach Counseling courses, credit classes for job preparation, college survival skills, career planning, study skills and group dynamics.

Planning an academic program is each student’s choice and responsibility. Students are urged to meet with a counselor well in advance to develop and/or update their Student Educational Plan (SEP) in order to obtain current information regarding their course of study and any catalog revisions.

Transfer Center

The Transfer Center assists students with the transfer process from Fresno City College to a baccalaureate (bachelor) level college or university. The center provides a variety of informational resources for students about the 9 Universities of California (UC), 23 California State Universities (CSU), and provides information on private and out-of-state colleges and universities. Transfer Counselors are also available to assist in developing a Student Educational Plan (SEP) for transfer.

The Transfer Center is located on the second floor of the Student Services Building (ST/Bldg 10). For more information, visit our website: www.fresnocitycollege.edu/transfercenter or call (559) 442-8290.

For additional information, refer to the Transfer Information and Requirements section in the catalog.

Dream Center

The Dream Center is designed to provide information and academic counseling to new and continuing undocumented students at Fresno City College. Counselors and staff assigned to the Dream Center will assist students in overcoming challenges of access and completion of vocational or transfer-level goals in higher education. The majority of the students served in this office will be identified as Dreamers, Deferred Action for Childhood Arrivals (DACA) or seeking AB 540 status.

The Dream Center is located in the Old Administration Building, OAB-137. For more information, visit our website: www.fresnocitycollege.edu/student-services/programs/dream-center.html or call (559) 443-8570. Questions may be emailed to migrantsss@fresnocitycollege.edu.

Disabled Students Programs and Services (DSP&S)

The DSP&S Program assists students with disabilities to equally participate in the instructional offerings of the college by providing “above and beyond” services to meet their disability-related educational limitations. These services foster independence and maximum integration into campus life for students with disabilities and are in conformance with the overall mission of Fresno City College.
The student with a disability seeking admission to Fresno City College must meet the following levels of independence:

1. The ability to negotiate the campus facilities independently or with the assistance of an attendant (to be provided by the student);
2. The ability to take care of their personal needs independently or with assistance of a personal attendant; and
3. The possession of a stable level of health in order to benefit from a full semester's work.

Each student with a disability must sign an authorization at the time of registration which would allow Fresno City College, in the absence of a personal attendant, to seek emergency medical treatment and/or ambulance services in the event it is deemed necessary by Fresno City College. (All costs associated with such medical treatment/transportation are the sole responsibility of the student.)

A “student with a disability” is a person enrolled at a community college who has a verified disability, which limits one or more major life activities resulting in an educational limitation. The existence of a disability may be verified by one of the following means: observation by certificated DSP&S staff; assessment by certificated DSP&S staff; or review of documentation by certificated staff provided by appropriate agencies or certified or licensed professionals outside of DSP&S.

Students are required to meet with a DSP&S counselor to develop an Academic Accommodation Plan (AAP) regarding the academic adjustments, auxiliary aids, services and/or instruction necessary to provide the student equal access to the educational process, given the educational limitations resulting from the student’s verified disabilities.

Architectural barriers have been eliminated through the use of low gradient ramps and automatic doors. The college maintains relationships with the Department of Rehabilitation, California Association for the Physically Handicapped and similar agencies. Call (559) 442-8237 for additional information.

**Extended Opportunity Programs and Services (EOPS)**

The Extended Opportunity Programs and Services (EOPS) provides programs and services over, above, and in addition to the regular educational programs of the College and is designed to assist educationally and economically disadvantaged students to be successful in their educational program at Fresno City College.

Services include academic counseling, personal advisement, special instruction, career guidance, tutorial assistance, academic mentoring, financial aid assistance, college transfer counseling, book grants, emergency loans, vocational internships, and priority registration.

Participants are selected according to academic and financial need. The goals of EOPS are directed toward (a) ensuring open access, (b) enhancing student retention, (c) developing systems to increase student success, and (d) providing counseling and support services to achieve vocational training, degree completion, or transfer success.

Students are identified as eligible by staff, contacted and provided a special college orientation, which specifies student and program mutual responsibilities. EOPS mandated services such as educational plan development, progress review session, and end-of-term evaluation are specified. Once selected, the EOPS student continues to receive top priority for continuing EOPS assistance for a maximum of 6-semesters or 70-units; and as long as he/she maintains adequate academic progress and meets all program requirements.

Two supplemental programs exist under the umbrella of EOPS: 1) Cooperative Agencies Resources for Education (CARE) provides additional support and assistance for EOPS students who are recipients of Temporary Assistance for Needy Families (TANF), and single head of household with children under 14 years; 2) The Cooperating Agencies Foster Youth Education Services (CAFYES) is designed to encourage the enrollment, retention, and transfer of current and former foster youth in California’s Community Colleges.

EOPS is located in the Student Services Building, lower level, room ST-101. Call (559) 442-8231 for additional information.

**District Police**

The District Police Department aids in the instructional and administrative processes of the college and district by protecting the person and rights of all district employees, district and student body property, and private property. Assistance will be given to victims of any type of crime or to persons seeking general law enforcement information. Individuals requiring emergency assistance can call campus police using one of the emergency telephones located in yellow boxes with blue lights outside campus buildings. To report suspicious activities or ask for police assistance, call the Campus Police at (559) 244-5911.
Financial Aid

Financial Aid and Scholarships
The college provides financial assistance to as many students as possible through scholarships, grants, loans and job opportunities. The following programs are available to qualified students:

- Federal PELL Grants
- Federal Work Study
- Federal Supplemental Educational Opportunity Grants
- Federal Direct Student Loans
- California College Promise Grant (formerly known as the Boards of Governors Enrollment Fee Waiver)
- Cal Grants
- Full-Time Student Success Grant
- Bureau of Indian Affairs Scholarships
- Other Institutional and Noninstitutional Scholarship

Expenses will vary with the type of housing, course of study, transportation, and other factors. Typical annual student expenses are outlined on the financial aid web page at www.fresnocitycollege.edu/financialaid/.

Application forms and information concerning financial aid and scholarship programs are available in the Financial Aid Office, room 201, Student Services Building.

Students must apply by March 2 of each year prior to the fall semester if they wish to be considered for the Cal Grant program. Those students applying for the fall semester will be given priority, if eligible, for other state and federal programs if their application is processed and received by the Financial Aid Office by the published priority deadline date. For more information, call (559) 442-8245.

Coursework Repeatability
A student will only be paid for a passed class, a maximum of two times. If the student chooses to enroll in the same course a third time, the units will be deducted from their Title IV eligible units. A “D” grade is considered passing for financial aid purposes regardless of institutional policy.

Return of Federal Financial Aid Based Upon Total Withdrawal
A student, who withdraws from all their classes within 60 percent of a semester, will be reviewed by the Financial Aid Office to determine if all or part of any federal financial aid received must be returned to the federal government.

Financial Aid Satisfactory Progress
To be eligible to participate in the Title IV student financial aid programs provided by the U.S. Department of Education and the State Center Community College District, students must maintain satisfactory academic progress in a program leading to a degree or certificate at the college or transfer to a four-year institution.

Students must maintain at least a 2.0 and must complete at least 67 percent of the units attempted each semester per the Financial Aid Satisfactory Academic Progress Policy. Students will no longer be eligible for financial aid once they have attempted 150 percent of the required units needed for their educational objective. Additionally, a student also may not be funded for more than 30 units of remedial course work.

The student must be enrolled in an eligible program at Fresno City College, and the remedial course work must be necessary for the student to pursue an eligible postsecondary program.

Students who are terminated from financial aid programs or who are not allowed to participate due to failure to demonstrate or maintain satisfactory progress may appeal this action in writing. The Financial Aid Appeal Committee will review the student’s progress and determine whether or not the student will be allowed to participate in financial aid programs. Petitions are available at the Financial Aid Office.

Beginning in the 2012-13 school year, students will have a lifetime Pell grant eligibility equivalent to 12 full-time semesters. All prior Pell grant funding will count toward a student’s lifetime eligibility. Once the student has exhausted their Pell grant, they will no longer be eligible to receive a Pell grant at any school ever again. There is no appeal process for lifetime eligibility.
Asistencia financiera

Asistencia financiera y becas
El College proporciona asistencia financiera a la mayor cantidad de estudiantes posibles a través de becas, subvenciones, préstamos y oportunidades laborales. Los siguientes programas están disponibles para los estudiantes calificados:

- Becas PELL federales
- Programa Federal Work Study
- Becas Federal Supplemental Educational Opportunity Grant
- Préstamos federales directos para estudiantes
- Promesa para colegios de California (anteriormente conocida como Pago de Matrícula por la Junta de Gobernadores)
- Becas Cal Grant
- Éxito Estudiantil para Estudiantes de Tiempo Completo
- Obras becas institucionales y no institucionales

Los gastos variarán según el tipo de vivienda, rama de estudios, transporte y otros factores. Los gastos estudiantiles anuales habituales se describen en la página web sobre asistencia financiera en www.fresnocitycollege.edu/financialaid/.

Los formularios de solicitud y la información relacionada con los programas de asistencia financiera y becas están disponibles en la Oficina de Asistencia Financiera, sala 201, Edificio de Servicios a los Estudiantes.

Los estudiantes deben inscribirse antes del 2 de marzo de cada año antes del semestre de otoño si quieren ser tenidos en cuenta para el programa de la beca Cal Grant. A los estudiantes que presenten su solicitud para el semestre de otoño se les dará prioridad, si son elegibles, para otros programas estatales y federales si su solicitud se procesa y recibe en la Oficina de Asistencia Financiera antes de la fecha publicada de prioridad. Para obtener más información, llame al (559) 442-8245.

Repetición de un curso
Solo se les pagará a los estudiantes por un curso aprobado, como máximo dos veces. Si el estudiante opta por inscribirse en el mismo curso una tercera vez, las unidades se deducirán de sus unidades elegibles conforme al Título IV. A los fines de la asistencia financiera, una calificación “D” se considera aprobada, independientemente de la política institucional.

Devolución de la asistencia financiera federal luego del abandono total del curso
La Oficina de Asistencia Financiera revisará la situación del estudiante que abandone el total de sus clases dentro del 60 por ciento de un semestre, con el fin de determinar si debe devolverse al gobierno federal la totalidad o una parte de la asistencia financiera federal recibida.

Avance satisfactorio para la asistencia financiera
Para ser elegible para participar en los programas de asistencia financiera para estudiantes en virtud del Título IV otorgados por el Departamento de Educación de los EE.UU. y por State Center Community College District, los estudiantes deben mantener un avance académico satisfactorio en un programa orientado a conseguir un título o un certificado en el colegio o un pase para transferencia a una institución de cuatro años. Los estudiantes deben mantener al menos un 2.0 y completar como mínimo el 67 por ciento de las unidades iniciadas cada semestre de conformidad con la Política de Avance Académico Satisfactorio para la Asistencia Financiera. Los estudiantes dejarán de ser elegibles para obtener asistencia financiera una vez que hayan intentado el 150 por ciento de las unidades requeridas necesarias para su objetivo educativo. Además, tampoco se podrán proporcionar fondos para un estudiante por más de 30 unidades de clases de recuperación. El estudiante debe estar inscrito en un programa elegible en Fresno City College, y las clases de recuperación deben ser necesarias para que el estudiante prosiga con un programa de educación pos-secundaria elegible.

Los estudiantes a los que se les cancelen los programas de asistencia financiera o que no estén autorizados a participar por no demostrar o mantener un avance satisfactorio podrán apelar esta medida por escrito. El Comité de Apelaciones de Asistencia Financiera revisará el avance y determinará si el estudiante podrá o no participar en los programas de asistencia financiera. Las peticiones están disponibles en la Oficina de Asistencia Financiera.

A partir del año escolar 2012-2013, los estudiantes tendrán una elegibilidad vitalicia para una beca Pell equivalente a 12 semestres de tiempo completo. Todos los fondos de becas Pell anteriores contarán para la elegibilidad vitalicia de un estudiante. Una vez que el estudiante haya agotado su beca Pell, nunca más será elegible para recibir una beca Pell en ninguna institución educativa. No existe un proceso de apelaciones para la elegibilidad vitalicia.
Chaw Pab Nyiaj Kawm Ntawv (Financial Aid)

Chaw Pab Nyiaj Kawm Ntawv Thiab Lwm Yam Nyiaj Tau Los Ntawm Kawm Ntawv Zoo

Tsev kawm ntwaw qib siab muaj nyiaj pub rau cov neeg kawm tau ntwaw zoo, muaj nyiaj pub dawb, muaj nyiaj biais thiab nyiaj ua hauj lwm pub rau cov neeg kawm ntwaw. Cov kev pub hauv qab no yog cov muaj pub rau cov tub ntxhais kawm ntwaw uas muaj feem biais tau:

- Qhov Nyiaj Tsoom Fwv Muab Pab (Federal PELLGrants)
- Qhov Nyiaj Tsoom Fwv Them Ua Hauj Lwm (Federal Work Study)
- Qhov Nyiaj Pab Ntxiv Rau Kev Kawm Ntawv (Federal Supplemental Educational Opportunity Grants)
- Qhov Nyiaj Txais Los Ntawm Tsoom Fwv (Federal Direct Student Loans)
- California Community College lub Grant es Pab Nyiaj (lub npe thaum ub yog Board of Governor Enrollment fee Waive)
- Qhov Nyiaj Pab Los Hauv Xeev California (Cal Grants)
- Cov tub ntxhais kawm ntwaw cov nyiaj kev pab (full-time Student Success Grant)
- Qhov Nyiaj Tau Los Hauv Cov Neeg Indian Lub Koom Haum Los (Bureau of Indian Affairs Scholarships)
- Qhov Nyiaj Tau Los Ntawm Lwm Cov Koom Haum Los

Kev muaj nuj nqi ntau thiab tsawg kuj yog nyob ntawm nqi vaj tse, nqi ntaub ntawv, nqi khiav mus los, thiab lwm yam. Qhov qhia seb ib tug neeg kawm ntwaw twg yuav siv nyiaj thaj tsam pes tsawg no muaj qhia nyob ntwaw [www.fresnocitycollege.edu/financialaid/].

Muaj cov ntwaw ua mus thov cov nyiaj no thiab muaj cov ntwaw qhia beng cov qhooz kas pub nyiaj no nyob hauv loos kam Financial Aid Office, chav 201, Hauv lub tsev hu ua Student Services Building.

Cov neeg kawm ntwaw yuav tsum ua cov ntwaw thov cov nyiaj no tuaj ua ntej lub 3 hils tim 2 bhuaw xya thiaw yuav tau baiz cov nyiaj los kawm ntwaw rau thauum lub 8 hli yoi laww muaj feem txais taw. Cov neeg kawm ntwaw uas thov rau lub caij hais no yog cov yuav xub tau txais, yog laww muaj feem, tabis rai lwm lub xeev thib lwm yam kev pab los hauv tsoom fww los ces tsauv tuaj beng hauv Loos Kam Financial Aid Office ua ntej lub 4 hils, tim 15 xwb ces tau lawwm. Yog xav paub ntau tsaj nov, hu tau rau (559) 442-8245.

Cov Hoob Uas Rov Qab Kawm Tau

Cov neeg kawm ntwaw tsuas tau them rau cov hoob uas laww kawm dhau xwb, tabsis tsuas pub 2 zaug xwb. Yog ib tug neeg kawm ntwaw xav rov qab kawm dua zaum 3, nws qhov qab nias yuav muab rau tawm los hauv hauv qhov qhab nias uas nws muaj feem biais taw raws li toej tai Title IV. Tawkaw tau tus "D" xwb los hauv hauv qhov chaw muaj nyiaj pub no yuav tsis xam lawwm tawkaw muaj lwm toej tai kwv los tsis ua cas.

Kev Muab Cov Nyiaj No Them Rov Qab Tauc Thaum Koj Muab Cov Hoob Rho Tawm

Thaum ib tug neeg kawm ntwaw muab nws cov hoob rho tawm txog 60 feem pua tauj ub toj yuav lawwm, Loos Kam Pab Nyiaj Financial Aid Office mam txiav txim seb nws cia pes tsawg thiab muaj pes tsawg rov qab mus rau tsoom fwv.

Chaw Pab Nyiaj Qhov Kev Ncaj Ncees

Us ntej yuav muaj feem txais tau cov nyiaj pab raws li Title IV uas yog cov nyiaj pab los hauv Tsoom Fwv lub Loos Kam Saib Xyuas KEv Kawm (U.S. Department of Education and the State Center Community College District), txhau tus neeg kawg ntwaw yuav tsum kawm kom tau nyob rau qhov uas nws yuav yuav tiav ib qib tsis hais yuav yoog 2 yuax os ho rov mus kawm kom puv 4 yuax ntxiv.

Cov neeg kawm ntwaw tis ubq nias yuav tsis yuav txis yuav txis xaij koob poob qis tshaj 2.0 thiaw yuav tsis yuav tsis kawm tsawg kawg yoog 67 feem pua ntwaw cov hoob uas kowj mus cuv npe kawm thiaj yuav txis tau cov nyiaj pab raws li qhov chaw muab nyiaj Financial Aid Satisfactory Academic Progress Policy txoj cai tau hais. Thaum cov neeg kawm ntwaw no kawm tau qhab nias txog 150 feem pua los ntwaw cov laww yuav yuav tsum kawm laww ces luaq yuav tsis yuav cov nyiaj pab raws li txog kev kawm lawwm. Dhau ntwaw, luaq yuav tsis kam pab nyiaj rau cov hoob uas kawm los lwm hoob yuav ttau tsaj 30 qhab nias lawwm. Nws yuav tsis nqag mus koom yuav rau Tsev Qhia Ntawv Fresno City College qhov qhooz kas saib xyuas cov hoob no thiab cov hoob uas kawm bxhawb no yuav tsis yuav tau koj mus kawm rau ub siab ntxiv.

Tag nrho cov neeg kawm ntwaw uas raugpu txaiv tsis pab nyiaj rau laww lawwm ces yuav tsis yuav txis nqag tau rau qhov qhooz kas pub nyiaj no laww lic laww kawm tsis tau ntwaw los sis kawm tsis tau qhab nias zoo muaj cai sau ntwaw tuaj foob qhov txaiv bxim no tau. Pub neeg saib xyuas qhov kev foob (The Financial Aid Appeal Committee) yuav ua tib zoo saib tus neeg kawm ntwaw no cov kev kawm thiab yuav txaiv bxim seb tus neeg kawm ntwaw no puas muaj feem yuav nqag tau rau lub qhooz kas pub nyiaj no. Muaj daim ntwaw koop nwe tsaab baas siab (Petitions) yuav hauv loos kam pab nyiaj (Financial Aid Office).
Food Services

The campus cafeteria offers an inviting atmosphere to share ideas or study. It features cooked-to-order breakfast and lunch items. Gourmet coffees, juices, baked pastries and snack items are also available. The cafeteria is open for breakfast, lunch and dinner Monday through Thursday and breakfast and lunch on Friday.

The Staff Dining Room provides a quieter atmosphere for enjoying breakfast or lunch.

Taher Food Services offers catering services for campus functions.

For quick snacks, vending machines are located throughout the campus. They are contracted through Canteen.

In addition to the above mentioned services, accident insurance coverage is available to students injured while on campus or at school-sponsored and supervised events. Call (559) 442-8268 for more information.

Housing Information

A list of housing accommodations in private homes and local apartments for students may be obtained by contacting the Student Activities Office. The college assumes no responsibility for contracts made between landlords and students. Call (559) 443-8688 for more information.

Learning Resources Center (LRC)

The college Learning Resources Center, located on the south side of the campus, houses all of the supplemental learning resources for faculty and students. The LRC includes the Library, Media Center, Tutorial Center, Student Success Computer Lab, Disabled Students Programs and Services High Tech Computer Lab, and a distance learning classroom. Additionally, the Teaching and Learning Center, Assessment Center and the Career Employment Center are housed in the LRC.

Library

The college Library contains ample seating for study including a 270 seat reference room, a 100 seat periodicals and reserves room, and a 100 seat reading and open stack room. The Library houses more than 90,000 hardbound volumes, subscribes to about 100 periodicals and newspapers, and provides access to about 25,000 electronic books and 20 online databases. Library staff are always available to provide individual assistance in the use of all the learning resources in the library.

The Library has a computer lab with 30 computers that are loaded with standard software and also provide access to the Internet. There are also a limited number of audiovisual materials that can be played on the lab's CD and DVD players. Copiers and printers are available for a small fee. The Library has handicapped accessible workstations and equipment. For more information, call (559) 442-8153.

Tutorial Services LI-134

The Tutorial Center offers learning assistance in all subject areas and academic success strategies. Peer tutors are faculty recommended and assist students in achieving their personal and academic goals. All tutoring is on a drop-in basis. Tutoring schedules vary from course to course so students should check tutor availability with the Tutorial Center receptionist. For more information call (559) 442-8209.

Health Services

The Health Services office is located in the Student Services Building, room 112.

Health services available to Fresno City College students include confidential health counseling, health education, screening tests, emergency first aid, assistance in obtaining medical care, limited immunizations and HIV and TB skin testing.
Writing and Reading Center (WRC)
The WRC assists students with any writing or reading assignment for any class at any stage in the development process. Our trained tutors provide a friendly, supportive atmosphere for all students. Students can drop-in or make an appointment. A limited number of computers are also available. The WRC is located on the Mezzanine for the Tutorial Center. Free printing is available for classroom assignments for which tutoring is provided. For more information, call (559) 442-4600, ext. 8188.

Math Support Center
The Math Support Center provides a variety of services for students seeking assistance with their math classes. Experienced math tutors help students learn foundational skills as well as build a comprehensive understanding of math and its relationship to real-world situations. The Math Center is located within the Tutorial Center and provides group, drop-in, and embedded tutors for many math classes. For more information, please call (559) 442-8209.

Extending the Class (ETC)
ETC provides class-specific study and review sessions. ETC provides students with space, guidance, and structure to successfully enhance their understanding of class course content. Weekly study sessions are led by a student who has recently taken the class from the same instructor and received a high final course grade. For more information, call (559) 442-8209.

English Support Center
The English Center is located in LI-142. Experienced peer leaders/tutors provide supplemental instruction and tutoring for English, EMLS (ESL), linguistics, and literature through group and individual sessions in the face-to-face and online environment. Free printing for classroom assignments is available for English, EMLS, linguistics, and literature students. For more information, call (559) 442-4600 ext. 8153.

Academic Computer Lab LI-118
The Academic Computer Lab has over 70 computers for all Internet and research needs. Some computers are loaded with course specific software. Copying and printing services are available for a small fee. For more information, call (559) 442-8208.

Career Employment Center LI-147
The Career Employment Center offers information on thousands of occupations and provides assistance with career planning and conducting a job search. Trained staff are available to provide guidance and direction in the use of materials and services. Services include career assessments, individualized career counseling, job listings, employment advising, job search workshops, on-campus interviews with employers, and job fairs. In addition, the Career Center maintains a library of career books, college catalogs, occupational files, and other reference materials.

The Career Employment Center strives to provide a broad range of services not only for students and alumni of the college but also for employers who wish to list job openings. Employment information and applications are available in the Career Employment Center located in the Learning Resources Center, LI-147. Employers may list job openings by calling (559) 442-8294 or visit our website at https://www.fresnocitycollege.edu/campus-life/career-and-employment-center.html.

Lost and Found
A lost and found department is maintained in the District Police Department, located on the east side of the campus on the corner of Weldon and Calaveras.

Psychological Services
The goal of Psychological Services is to assist students who experience interpersonal or personal difficulties during their college stay so they can remain effective in their educational pursuit. Psychological counseling is available for a variety of problems, including issues stemming from:

- Adjustment to college life
- Depression and anxiety
- Relationship and communication skills
- Stress and anger management
- Mental illness
- Substance abuse
- Eating disorders

Psychological Services are located above the bookstore, Room 216, (559) 443-8687.
Public Information

The Public Information Office provides on- and off-campus public relations, marketing and promotion for the college. All advertising, media relations and sports information are the responsibility of the Public Information Office. Brochures, class schedules, the college catalog, press releases, videos, sports programs, and the college web site are all produced by the Public Information Office. The Public Information Office also reviews all publications produced by other Fresno City College campus offices prior to on- or off-campus printing.

Photo and Videotape Policy

Fresno City College takes photos and videotapes students throughout the year. These images often include students in classrooms, study areas, athletic events, etc. Fresno City College reserves the right to use these photographs as a part of its publicity and marketing efforts. Students who enroll at Fresno City College do so with the understanding that these photographs might include them and might be used in college publications, both printed and electronic, and for publicity.

Special Student Programs

IDILE Program

Fresno City College’s IDILE Program is designed to enhance the leadership skills of all students, with emphasis on African Americans, while helping them develop the self-confidence to succeed in the post-secondary education experience.

IDILE (pronounced “i dee lay”) is a word borrowed from the African Yoruba Tribe that means “the root or source of the family.” The nurturing and mentoring approach taken by the specially trained counselor and instructors committed to helping students succeed at Fresno City College accurately reflects and reinforces the definition of the program’s moniker. The program provides opportunities for the students to build camaraderie with peers and develop lasting relationships with mentors. To obtain additional information about the IDILE program, call (559) 442-4600, ext. 8643.

Puente Project

The Puente Project at Fresno City College provides students with writing or math instruction, sustained academic counseling, and mentoring by professionals from the community. Students participate in the program for three consecutive semesters. The program consists of two cohorts. The first cohort consists of English 1A, English 205, Counseling 43 and Chicano Latino Studies 11 during the first semester; English 3 and Counseling 54 during their second semester. The second cohort consists of Mathematics 3A, Mathematics 205, and Counseling 43 during the first semester; Mathematics 4A and Counseling 54 during the second semester. Both cohorts will have continued counseling and program activities during the third semester. The course content of the Puente classes has a Chicano/Latino emphasis. Throughout the program, Puente students also maintain contact with their assigned Puente mentor.

The purpose of the Puente Project is to increase persistence, degree completion and the number of Fresno City College Latinx students who transfer to four year colleges and universities. Puente students participate in extra-curricular activities and field trips that promote transfer opportunities. Success at Fresno City College and the continued pursuit of higher education is greatly emphasized. The Puente Project is open to all students. For information, call (559) 442-4600, ext. 8628 or email: graciela.ramirez@fresnocitycollege.edu.

Resources for American Indian Needs (RAIN)

The RAIN Program is a learning community designed to promote, inspire and guide students upon entry, duration, and completion of their academic goals. The program purpose is to provide a support system for American Indian and indigenous people of the Americas, but is open to all students. Students will improve study skills and obtain tools for successful transition into college and/or vocational training opportunities. A collaborative atmosphere will be provided in which students will become a valued voice and member of our student population while maintaining their individuality. The RAIN Program provides the following areas of service:

- Academic Counseling/Transfer Assistance
- Peer Group Support
- Academic Tutoring for Success in Learning
- Financial Aid Assistance/Scholarships
- Career Exploration
- American Indian Program Activities
- Field trips (college campus tours)
To be eligible for the RAIN Program students must meet general admission requirements as outlined by Fresno City College (FCC) or be a current matriculated FCC student, participate in all activities sponsored by the program, and have an interest in obtaining a certificate, degree, or transfer to a four-year university or institution. The program is open to all students who desire to contribute, explore, and gain an understanding of the American Indian culture. The RAIN Program is a three-semester academic cohort. The student will enroll into an English (1A), American Indian Studies (31, 32, 34, or 35) and Counseling (150) course along with other major/elective courses appropriate for their area of study. The following semester will be similar, focusing on the appropriate level of English and/or Mathematics, American Indian Studies (31, 32, 34 or 35) and Counseling (54). The third semester will provide counseling follow-up services along with other appropriate major/elective coursework for the student's area of study. The Resources for American Indian Needs (RAIN) learning community program is in alignment with the FCC Student Equity Plan, which enables accessibility and support services for all American Indian/Alaska Native students to further prevent disproportionate transfer, degree, and certificate completion. For an application or more information, please contact Alexandra Gonzales at (559) 443-8564 or email at alexandra.gonzales@fresnocitycollege.edu.

Strengthening Young Men by Academic Achievement (SYMBAA)

The SYMBAA program, with emphasis on the African American male experience, assists students in achieving success through a coordinated program of courses and support. The program develops work habits and study skills and provides the education tools to be successful. For more information, call (559) 442-4600, ext. 2241.

USEAA Academic Program

USEAA (pronounced “you see ah” and stands for United Southeast Asian American) has a Southeast Asian emphasis and is an academic program established since 1999. The program integrates courses in English, Asian-American Studies, and provides counseling services in a learning community environment. The goals of USEAA is to provide support and a sense of connection to the campus for students so they can persist to work towards their goal of completion and/or transfer. Students also to participate in activities, a mentoring program, and engage in community events to enrich their academic experience.

Enrollment is open to all students who meet program eligibility and can adhere with program requirements. The program is comprised of counselors and faculty dedicated to help students excel and succeed. The office is located in the Old Administration Building (OAB), 2nd floor room 272. For more information, please contact us at (559) 442-8226, extension 8639 or Kami Thepphavong, Program Coordinator, at (559) 442-8226, extension 8608 or email: kami.thepphavong@fresnocitycollege.edu.

TRIO Programs

In commitment to providing educational opportunity for all citizens, Fresno City College has been awarded two programs fully funded by the U.S. Department of Education TRIO programs. These programs assist low-income, first generation students to enter college, graduate and move on to participate more fully and rewardingly in America's economic and social life. The Upward Bound program serves high school students to prepare them for post-secondary education. The Student Support Services Program (SSSP) serves college students at FCC.

Student Support Services Program (SSSP)

SSSP serves 160 FCC first generation, low income and disabled students to assure retention, graduation and/or transfer to a four-year college in a timely manner. SSSP provides advising, career planning, financial aid advising, transfer assistance, cultural events, college campus tours and lots of encouragement. Information and applications are above the bookstore in room SC-216, (559) 265-5789.

Upward Bound Program

The FCC Upward Bound program is an intensive pre-college enrichment program designed to help first generation, economically disadvantaged high-school students improve their academic performance, and prepare for college. The long term goal is to pursue careers that require a bachelor's degree or higher. The program provides tutorial and instructional sessions conducted at partnering high schools, FCC Saturday Empowerment Sessions, and FCC Summer School. Upward Bound program office is located in SC-216, (559) 443-8593.

Telephone and Mail Services

Telephone calls will not be transmitted to students. In cases of extreme emergencies, please call the District Police Department. Mail should not be addressed to students in care of the college.
STUDENT ACTIVITIES

The Office of Student Activities at Fresno City College offers students the opportunity to participate in student government, student clubs and organizations, campus activities, and social and cultural events. Participation in campus life has been shown to have a positive impact on student success and leadership development.

Associated Students

The Associated Students participate in the governing of the college community through its legislative body, the Student Senate. The Senate is composed of the student body president, vice president, treasurer, ICC chair, student trustee and 16 senators.

The following student clubs and organizations constitute the Inter-Club Council (ICC) and contribute actively to the growth and social life at Fresno City College:

- Alpha Gamma Sigma (AGS)
- All of Us or None
- Allied-Health Professionals Club
- American Institute of Architects (AIA)
- American Sign Language Club (ASL)
- Anime Club
- Architecture Club
- Art for Community Transformation (ACT)
- Asian American Club
- Bonsai Club
- CalWORKS Student Association
- Collegiate Entrepreneurs Organization (CEO)
- Computer Aided Drafting & Design (CADD) Club
- Dead Film Society
- Democratic Club
- Early Childhood Education & Educators Club (ECEE)
- Electrical Systems Technology Club (EST)
- EOPS Club
- FCC Catholic Student Association
- Fresno City Guitar Society
- History Club
- Hmong American Student Association
- Human Services Student Association
- I Will Ride
- IDILE
- International Students Association
- Lambda Alpha Epsilon (LAE)
- Law Pathway Club
- LGBTQ+ Spectrum
- Literature & Arts Society
- M.E.Ch.A.
- Music Teachers National Association
- Native American Intertribal Students Association (NAISA)
- New Media Club
- Nutrition & Culinary Club
- Pan Afrikan Student Union (PASU)
- Philosophy Club
- Pre-Health Society
- Puente Club
- RN Pinning Committee
- SADHA
- Science & Engineering Club
- Student Association for Sustainable Action
- Student Nurses' Association (SNA)
- Student Paralegal Association (SPA)
- Student Success Club
- Sustainable Action
- S.Y.M.B.A.A.
- Tabletop Gaming Club (Otaku)
- Teachers of Tomorrow
- UMOJA Community Club
- Veterans Club
- Volunteer Club

Organization of New Clubs

To be officially recognized, a club must have a minimum of 15 participating members, a program of approved activities, regular meetings, an approved constitution and a full-time faculty sponsor. Those considering organizing a new club must consult and plan with the Director of Student Activities.
Social Activities

The social life of students center around the calendar of activities hosted by the Associated Students’ clubs and organizations. Many activities are held in the Student Lounge and students are encouraged to participate to complement their classroom learning.

Athletics

Fresno City College offers students the opportunity for intercollegiate activity in a wide variety of sports. Competitive teams found in both men’s and women’s athletic programs include basketball, cross country, golf, soccer, tennis, and track and field. Volleyball, beach volleyball, water polo, badminton, softball, swimming and diving are offered for women only. Football, baseball and wrestling are offered for men only. A physical examination by the team physician and a statement of existing medical insurance are required before participation in collegiate sports.

Fresno City College is a member of the Central Valley Conference in most sports, and competes in the Big 8 Conference for tennis and water polo, the Coast Conference for wrestling and badminton, and the Valley Conference for football.

Athletics at Fresno City College, as with all California community colleges, is governed by the general regulations of the State Community College Athletic Code as well as the specific regulations of the conferences in which Fresno City College holds membership.

Publications

About Ourselves

About Ourselves is an annual publication featuring exceptional student writing sponsored by faculty in the Preparatory English Department. To be eligible for publication, you must be a student in one of the Developmental or Preparatory English classes.

The FCC Review

The FCC Review is an annual literary and arts journal that publishes Fresno City College student poetry, fiction, non-fiction prose, photography, and art work. Interested students may contact the Humanities Division Office.

The Rampage

The college offers students opportunities to work on publications through the production of the college newspaper, The Rampage.

The Rampage is an award-winning newspaper published bi-weekly at Fresno City College by students of the college’s journalism courses. The Rampage is a member of the Journalism Association of Community Colleges, an organization that has acknowledged the newspaper’s “general excellence” in recent years, along with recognizing individual students’ contributions with awards in numerous categories. Former students of the college’s journalism program have transferred to various universities and many currently work in newsrooms throughout the nation.

Forensics

Fresno City College offers instruction and travel in competitive speech and debate. The college’s forensics team traditionally ranks in the top ten among all colleges in the United States, both four-year and community colleges. Five Fresno City College teams have been named national champions. Students compete in a variety of debate and individual events. Team members travel to tournaments throughout the western United States. Students may earn units for participation in the forensics program by enrolling in Communication 26. For more information, contact the Fine, Performing, and Communication Arts Division Office.
Museum of Anthropology

The Social Sciences Division is home to the Fresno City College Anthropology Museum and Archaeological Curation Facility. Located in SO-128, the museum presents exhibits about human culture drawn from both its ethnographic and archaeological collections. The museum is free to students, faculty, staff, and community members. Fresno City College students also have the opportunity to participate in museum operation, learn about exhibit development, and the curation of museum collections. Tours and activities at the museum are led by FCC student docents. For hours of operation or to arrange a tour, please contact Beth Wengerd at (559) 442-8210 ext. 8343. For information about exhibits and collections, please contact Dr. Jill Minar at (559) 442-8210 ext. 8360.

Music Activities

Music organizations at Fresno City College have dual functions: as courses for music credit and as college musical activities groups which perform for a variety of college and community events. The concert band; college choir; symphony orchestra; city singers; jazz bands; and woodwind, brass, piano, string, percussion, and vocal ensembles present recitals and concerts both on- and off-campus.

All performing groups are open to any student who has the musical ability and experience.

Theatre Arts and Dance

Theatre Arts and Dance students have the opportunity to participate in four major productions, two dance concerts, and the very popular New Wrinkles Senior Citizens Showcase each year. All of the productions are staged in the Fresno City College Theatre, which includes a 430-seat main stage and a studio theatre with flexible seating for up to 100.

In addition to regular course work, the department annually participates in the Kennedy Center/American College Theatre Festival and The American Dance Theatre Festival. The department is also active with United States Institute of Theatre Technology.
SPECIAL AREAS OF STUDY

Allied Health

The Allied Health, Physical Education, and Athletics Division offers courses for fulfilling requirements in a number of occupational programs; such as, autism technician, dental hygiene, health information technology, medical assistant-clinician, radiologic technology, registered nursing, and respiratory care practitioner.

Students complete the appropriate Academic Summary Form for consideration for acceptance into most health care career programs. Registered Nursing also utilizes a multi-criteria screening process via an online application. Students must also meet the normal admission requirements as fully matriculated regular students at Fresno City College.

Career & Technology Center

Located off Fresno City College's main campus, the Career & Technology Center offers a learning environment for practical hands-on education. Year-round registration is in effect for a variety of noncredit, open-entry classes. Counseling and job placement services are available.

CTC is located at 2930 E. Annadale Avenue, Fresno. For a complete listing of classes, call (559) 265-5700.

AUTOMOTIVE COLLISION REPAIR

371 FUNDAMENTALS OF WELDING TECHNOLOGY AND WORKING SHEET METAL
2.78 lecture hours, 13.89 lab hours,
(300 total hours), (Repeats = 3), (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: None.

Theory and practice in MIG welding, oxyacetylene welding, steel rod, brazing rod, plasma cutter, metal shrinking, working sheet metal, welded panel replacement, restoring corrosion protection, hand tool technology, shop safety and efficiency, job success and ASE certification.

372 BODYWORK TECHNOLOGY
2.78 lecture hours, 13.89 lab hours,
(300 total hours), (Repeats = 3), (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: None.

Collision repair introductions and careers. Includes estimating repair costs, vehicle construction and power tool technology, service specification and measurements, using body filler, doing hood, bumper, fender, lid, door, roof, and glass service. Looking at restraint system operation, passenger compartment, body/frame measurement, and unibody/frame realignment.

373 AUTOMOTIVE REFINISHING TECHNOLOGY
2.78 lecture hours, 13.89 lab hours,
(300 total hours), (Repeats = 3), (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: None.

Compressed air technology, refinishing materials and fasteners, repairing plastics, refinishing equipment technology, vehicle surface preparation and masking, refinishing procedures, color matching and custom painting, and paint problems and final detailing.

AUTOMOTIVE MECHANICS (AMCTC)

371 ENGINE REPAIR
11.11 lecture hours, 22.33 lab hours,
(600 total hours), (Repeats = 3), (Open Entry/Open Exit), (Pass/No Pass), (Formerly AMVTC 71)
PREREQUISITE: None.

Preparation for ASE certification in engine repair.

Practical and theoretical training in general engine diagnosis, cylinder heads, valve train, engine block, lubrication, and cooling systems.
372 ENGINE PERFORMANCE
16.67 lecture hours, 33.33 lab hours, (900 total hours), (Repeats = 3), (Open Entry/Open Exit), (Pass/No Pass), (Formerly AMVTC 72)
Basic skills necessary for an entry level job. Competency based similar to those operations performed by automotive shop professionals. Prepares students to take the ASE certification tests.

375 AUTOMOTIVE BRAKE SYSTEMS
1 lecture hour, 1.8 lab hours, (Repeats = 3), (Pass/No Pass)
Diagnose, service, and repair, braking systems related to automotive vehicles.

INDUSTRIAL TRAINING (ITCTC)

371 WAREHOUSE AND DISTRIBUTION CAREERS
2 lecture hours, 3 lab hours, (90 total hours), (Repeats = 3), (Open Entry/Open Exit), (Formerly ITVTC 71)
COREQUISITE: Industrial Training CTC 372.
Forklift and electric pallet jack safety and operation skills necessary for employment in warehouse environment. Warehouse inventory and processing procedures utilizing computer based program resulting in logistics certification, basic and applied mathematics, basic computer, reading and writing practice, warehouse equipment like strapping and manual pallet jack.

372 WAREHOUSE AND DISTRIBUTION CAREERS
2 lecture hours, 3 lab hours, (90 total hours), (Open Entry/Open Exit), (Repeats = 3)
COREQUISITE: Industrial Training CTC 371.
Provides forklift operation and safety skills necessary for employment in warehouse environment. Warehouse inventory and processing procedures utilizing computer based related programs, mathematics and proper packaging techniques to industry standards.

MAINTENANCE MECHANIC (MMCTC)

370 FUNDAMENTALS OF WELDING AND MACHINE SHOP
5.55 lecture hours, 11.11 lab hours, (300 total hours), (Repeats = 3), (Formerly MMVTC 70)
Basic gas, arc, MIG, TIG (mild steel only). Precision measurement, hand tools, engine lathe, drilling, milling.

371 FUNDAMENTALS OF HYDRAULICS AND PNEUMATICS
5.55 lecture hours, 11.11 lab hours, (300 total hours), (Repeats = 3), (Formerly MMVTC 71)
Hydraulic and pneumatic principles, pumps, actuators, valves, schematics, operating systems.

372 ELECTRICAL FUNDAMENTALS
5.55 lecture hours, 11.11 lab hours, (300 total hours), (Repeats = 3), (Open Entry/Open Exit), (Formerly MMVTC 72)
Electrical principles, AC/DC circuits, motors, motor starters, relays, wiring, troubleshooting, schematic reading, test instruments, variable speed drives.

MANUFACTURING MECHANIC (MFGMCTC)

351 INTRODUCTION TO MANUFACTURING
0.5 lecture hours, (9 hours), (Pass/No Pass)
PREREQUISITE: None.
Career in manufacturing, local job market, pay scales; basic mechanical skills required throughout the industrial areas; safety and safe working environment will be stressed.

352A TRADE MATHEMATICS
1 lecture hour, (18 hours), (Pass/No Pass)
PREREQUISITE: None.
Industrial technology and trade-related math. The use of metric system of weights and measures, arithmetic application of integers and fractions, along with ruler and caliper readings commonly used in manufacturing trades.

352B PROGRAMMABLE CONTROLLERS
0.25 lecture hours, 0.75 lab hours, (18 hours), (Pass/No Pass)
PREREQUISITE: None.
An introduction to the equipment and peripheral devices used to interface with industrial controlling devices.

352C JOB PREPARATION
1 lecture hour, (18 hours), (Pass/No Pass)
PREREQUISITE: None.
Preparing resumes, portfolios, and improving employment-seeking skills.
352D TECHNICAL REPORT WRITING
1 lecture hour, (18 hours), (Pass/No Pass)
PREREQUISITE: None.
Identify and write various manufacturing types of reports; analyze data, and record data that are associated with production work.

353A FLUID POWER FUNDAMENTALS
0.5 lecture hours, 0.75 lab hours,
(18 hours), (Pass/No Pass)
PREREQUISITE: None.
Fundamentals of fluid power; physics principles pertaining to fluid power; various differences in hydraulics and pneumatics; characteristics of liquids and gases.

353B PNEUMATIC FUNDAMENTALS
0.25 lecture hours, 0.75 lab hours,
(18 hours), (Pass/No Pass)
PREREQUISITE: None.
Theory and application in the operation, service, and function of hydraulic systems including design and application of systems in industrial environments.

353C HYDRAULIC FUNDAMENTALS
0.25 lecture hours, 0.75 lab hours,
(18 hours), (Pass/No Pass)
PREREQUISITE: None.
Theory and application in the operation, service, and function of hydraulic systems including design and application of systems in industrial environments.

354A POWER TRANSMISSION
0.5 lecture hours, (9 hours),
(Pass/No Pass)
PREREQUISITE: None.
Fundamental concepts of power transmission. Application of gears, belts, chains, and pulleys will be discussed.

354B WELDING FUNDAMENTALS
0.25 lecture hours, 2.25 lab hours,
(45 hours), (Pass/No Pass)
PREREQUISITE: None.
Basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, arc welding, and safety within the work environment.

354C ELECTRICAL FUNDAMENTALS
0.25 lecture hours, 2.25 lab hours,
(45 hours), (Pass/No Pass)
PREREQUISITE: None.
Fundamentals of electrical theory, AC circuitry, as well as an instruction to motor control.

Developmental Education Program

The Developmental Education Program is designed to prepare students for degree credit instruction. The program is recommended for students who are assessed as not meeting the skills requisites for Mathematics 102 or 103 or English 125 and 126. It is not recommended for students who are learning English as a second language or who have identified learning disabilities. Course credits earned in the program do not count for the associate degree but do count for determining full- or part-time student status (i.e., workload credit). The particular courses a student takes depend upon the individual needs of the student.

Entrance into the Program

Assessment of academic preparation for college-level instruction is recommended for all students entering Fresno City College. It is required for all students wanting to enroll in English and mathematics courses.

Entry into the Developmental Education Program depends upon English and math placement testing results. When placement test scores in reading are 15 and below or in English written expression are 19 and below or in mathematics are 24 and below, appropriate developmental education program courses in English or math are recommended.

Other courses in the program supplement instruction in developmental education English and mathematics courses. For example, exploratory courses in selected academic departments reinforce the reading and writing skills being learned in the developmental English courses.
Benefits of the Program

Developmental Education students enjoy the following benefits:
- Development of reading, writing, and computation skills sufficient to succeed in college-level instruction
- Curriculum tailored to the individual's particular needs so that courses taken are consistent with one's background and experience
- Development of beginning level of computer literacy
- Opportunity to review previously learned material
- Emphasis on helping students succeed at the college
- Specially trained teachers and counselors who understand and are sensitive to student worries and fears

English for Multi-Lingual Students (EMLS) Program

**Purpose**
The EMLS program is designed for students whose native language is not English. The program assists students to acquire the necessary English language skills to succeed in AA/AS degree programs, vocational programs and university transfer courses offered at Fresno City College.

**Description**
There are four levels of EMLS in the program: low-intermediate (EMLS 263RW/363RW), intermediate (EMLS 284RW/384RW), high-intermediate (EMLS 285RW/385RW), and advanced (EMLS 180RW). Additionally, EMLS offers courses in pronunciation and accent reduction (EMLS 270/370) and listening and speaking (EMLS 264LS/364LS).

**Placement**
Initial placement in EMLS course offerings is the result of language testing and other criteria. This test is administered by the Counseling Center at the same time as the English Placement Test. Please call (559) 442-8282 for dates and times.

Fire Academy

The Fire Academy curriculum is designed to prepare students for the occupation of Fire Fighting and provides extensive hands-on training required by many fire agencies for entry-level employment as a firefighter.

Throughout the Fire Academy, there is a strong emphasis on physical training and manipulative testing. Cadets are required to pass a comprehensive physical fitness exam to successfully complete the academy. The physical fitness training emphasizes endurance as well as strength and technique.

Honors Program

The Leon S. Peters Honors Program at Fresno City College provides an enriched educational experience to recognize and meet the needs of academically excellent students. Students who qualify, and are accepted to enter the Honors Program, benefit from the experience regardless of major, because of a specially selected curriculum that is set within the framework of the transfer program of all University and California State University campuses. Honors courses are innovative and reflect the instructors’ interest in and commitment to the students’ academic, intellectual, cultural, and social development.

**Benefits**
Honors students enjoy the following benefits:
- Special sections of regular classes
- Specially selected, experienced, and highly qualified faculty
- Faculty mentors
- Registration, counseling, and transfer assistance
- Scholarships
- Priority acceptance at a University of California or California State University campus
- Opportunities to participate in cultural, social, and intellectually-stimulating activities
- Recognition on transcripts

**Requirements for Consideration of Acceptance**

Requirements for Acceptance for high school seniors:
- G.P.A. of 3.50 (4.00 scale), or
- G.P.A. ranking within the top 25th percentile of your high school class, or
- Combined scores of 1200 on the SAT or a composite score of 24 on the ACT

Requirements for Acceptance for current college students who have completed at least 12 transfer-level college units:
- College G.P.A. of 3.30

Application requirements include:
- Two letters of recommendation, and
- Superior performance on an essay.

For details regarding the Honors Program, please refer to page 180 in this catalog or consult with Honors Program staff at (559) 442-4600, ext. 8470.
Police Academy

Fresno City College’s State Center Regional Training Facility is a Public Safety Training Academy specializing in the training of public safety personnel. All police classes are certified by the Commission on Peace Officer Standards and Training. All correctional/probation classes are certified by the Board of Correction’s Standards for Training for Corrections. All Police Academy courses are “For Credit” and not transferable.

- Advanced Technical Courses—classes designed for in-service personnel already employed by a public safety agency.
- Correctional Academy and Probation Core Courses—offered in conjunction with local agencies and is required to work as a correctional officer, probation officer, or juvenile counselor for a local agency.
- Dispatcher Academy—designed for those who have been hired as, or want to become a complaint/dispatcher for a public safety agency.
- Regular Basic Course—Intensive and Extended Format—required in order to be hired as a full-time peace officer in California. The basic academy is offered in three different formats.
- Regular Basic Course—Modular Format—designed for those who want to become reserve police officers or a reserve deputy sheriff. Training modules qualify the student to become a Level III, II, or I reserve officer. Completion of all three levels satisfies the requirements for the Regular Basic Course.

ROTC Studies – U.S. Army and U.S. Air Force

Fresno City College students may register for classes designed for those who wish to explore becoming an officer in the United States Army or the United States Air Force. These classes are conducted at California State University, Fresno and at Fresno City College. Students must be in good academic standing and be enrolled at Fresno City College. Interested students should contact the Fresno City College Admissions Office, ST-111, to obtain more information on how to register for these classes.

Fresno City College will accept the units as general elective units toward the AA or AS degree. The freshman and sophomore courses are non-obligation and allow students to experience what the Air Force or Army might be like should they decide to continue with the program and earn a commission. A number of scholarships are available through both programs.

Consult the Military Studies Department, (559) 244-2638, at Fresno City College or the Aerospace Studies Department, (559) 278-2593, at California State University, Fresno for information on courses offered and class meeting times.

Veterans Services

Veterans Services, located in Building A, provides assistance to veterans and their dependents. Open from 8 a.m. to 5 p.m. Monday through Friday, the staff will assist veterans and dependents in applying for educational benefits. Counseling and academic advising are available in the Counseling Center.

Educational Benefits for Veterans and Dependents

The following students may be eligible for veterans’ educational benefits:

1. Veterans who were separated from active duty with the armed forces within the past 10 years.
2. Spouses or children (under 26 years of age) of veterans who were either killed while serving in the armed forces or were totally and permanently disabled while on active duty.
3. Widows or children of veterans who were residents of California at the time of entering the service and have a 50 percent disability may qualify for Cal Vet benefits.
4. Persons in one of the armed forces reserve programs who meet the minimum requirements of a special benefit program may be entitled to receive some educational and/or financial assistance.
5. Post 9-11 benefits will pay eligible individuals:
   - Tuition and fees directly to the school, not to exceed the maximum in-state tuition and fees at a public Institution of Higher Learning.
   - A monthly housing allowance based on the Basic Allowance for Housing for an E-5 with dependents at the location of the school.
   - An annual books and supplies stipend of $1,000 paid proportionately based on enrollment.

Veterans are required to go on-line to learn more about this program in order to make an informed choice.

Further information may be obtained from Veterans Services, Building A, or from any Veterans Administration office.
Special Areas of Study

Progress and Attendance Policies

Veterans and eligible dependents are required to show satisfactory progress. Minimum standards, established by the college, require that all students comply with satisfactory progress policies.

The Veterans Administration will be notified of any veteran who has been dismissed for not making satisfactory progress. For further information, contact Veterans Services, Building A.

A veteran is entitled to receive pay up to the last day of attendance for a class for which a “W” entry grade has been assigned. The VA will require that the money be paid back for such classes if paid after the last day of attendance.

A veteran must state a declared major for the VA in order to maintain eligibility for veterans’ benefits.

Veterans who have completed 45 units at Fresno City College and/or elsewhere must obtain a degree evaluation from the Admissions and Records Office. Applications for degree evaluations are to be completed online through WebAdvisor or in the Admissions and Records Office.

Veterans and eligible dependents have the responsibility to notify the Veterans Office whenever a change in program, address or dependents is made. All veterans/dependents are urged to contact the Veterans Office regularly in order to be aware of the various changes in VA rules and regulations which may occur during the school year.

Academic Limitations

Veterans/dependents attending Fresno City College who have earned a degree and/or have attempted sixty (60) or more units can only be certified for those courses which are either required to complete their degree objective at Fresno City College or meet a prerequisite for that requirement. Except in those cases where vocational work experience is required for the degree being pursued by the veteran, veterans with 60 or more units may not be certified for it. Veterans enrolled in occupational work experience must be engaged in work which is directly related to the veteran's major as declared with the VA. General work experience is not payable under any circumstances. Apprenticeship courses are payable under certain conditions. Also, veterans must enroll in and complete at least six units during the regular semester or two units during the summer session in order to be eligible for VA educational payments. Finally, a veteran may be certified to repeat a class for which a grade of "D" or better has been assigned only if the better grade is required as a prerequisite for the approved program.

Work Experience (Cooperative) Education

The cooperation of Fresno City College, business, industry and the community makes it possible for students to earn elective credit toward a degree and/or a certificate of achievement through employment experience. For the satisfactory completion of the program of cooperative work experience education, the college will grant credit to a student in an amount not to exceed eight (8) units per semester for occupational/vocational work experience or one (1) to six (6) unit(s) per semester for general work experience. Students can earn no more than a total of 16 semester units of Cooperative Work Experience Education subject to the limitations as described below.

The Cooperative Work Experience Education Program can be an important motivating experience, especially for those who have had inadequate opportunities to learn about the working world. The students meet weekly with an instructor/coordinator who is well prepared professionally to assist in the development of job skills. The coordinator makes on-site job visitations at which time they confer with the student’s supervisor. The student's work performance and progress is evaluated by both the coordinator and the supervisor.

Types of Cooperative Work Experience

1. General work experience education is the supervised employment of students with the intent of assisting them to acquire desirable work habits, career awareness, and positive attitudes in jobs. The jobs held by students need not be related to their occupational goals or college program.

2. Occupational/vocational work experience education is the extension of occupational learning opportunities and career awareness for students through employment in the occupational fields for which their college programs or majors are designed.

School Credit

For the satisfactory completion of all types of Cooperative Work Experience Education, students may earn up to a total of 16 semester credit hours, subject to the following limitations.

1. General work experience education: A maximum of six semester credit hours may be earned during the student’s lifetime. All six credit hours can be taken in one enrollment period or spread out over multiple enrollment periods.

2. Occupational work experience education: A maximum of eight credit hours may be earned during an enrollment period in occupational work experience education.
Duplicate credit shall not be granted for concurrent enrollment in general work experience education and occupational/vocational work experience education. The amount of college credit earned by the student for cooperative work experience education is dependent upon the number of hours of work during the semester as follows:

One unit of credit for each 75 hours of paid work hours, or one unit of credit for each 60 hours of volunteer work hours.

Transfer Credits
Students should review the catalog of the college to which they plan to transfer to determine the number of units of cooperative work experience that will transfer.

Qualifications
In order to qualify for either the general or occupational/vocational Cooperative Work Experience Education Program, the student must be enrolled in at least one other course in addition to the work experience class throughout the semester. The student's supervisor must be located in the Fresno City College service area and be easily accessible to the instructor. During each semester enrolled in cooperative work experience, the student must attend the coordinating class for one hour per week.

In addition to the above requirements, students enrolling in occupational/vocational work experience courses must be employed in occupations which provide experience directly related to their occupational major. (Title 5, Division 6, Section 55250 of California Administrative Code.)

The Enrollment Process
If students are interested in enrolling in cooperative work experience education or obtaining more information, they should contact one of the cooperative work experience instructors or a college counselor. Those students qualified to enroll will obtain authorization to register from the Work Experience Office in Admissions and Records. The occupational work experience courses are listed in the schedule under the various occupational subjects and are always designated by the 19 series, except for Art 19. General work experience courses are listed under Work Experience, General.

See catalog description of courses for further information. Majors and areas of study in which students may currently obtain occupational/vocational work experience credit are:

- Accounting
- Allied Health
- Applied Technology
- Automotive Technology
- Business Administration
- Business & Technology
- Child Development
- Computer Information Technology
- Construction (Carpentry)
- Criminology
- Education
- Electrical Systems Technology
- Fashion Merchandising
- Food Service Management
- Human Services
- Journalism
- Marketing
- Medical Assisting
- Paralegal
- Recreation
- Registered Nursing

Note: Actual class offerings vary by semester.
AREAS OF STUDY BY DIVISION

ALLIED HEALTH, PHYSICAL EDUCATION, AND ATHLETICS DIVISION
Allied Health
- Pre-Allied Health Registered Nursing Option
- Public Health for Transfer
- Autism Technician
- Dental Hygiene
- Kinesiology
- Kinesiology for Transfer
- Health Information Technology
- Medical Coding
- Medical Assistant - Clinician
- Nursing, Registered
- Physical Education
- Public Health
- Radiologic Technology
- Recreation
- Recreation Leadership
- Respiratory Care
- Sports Medicine

APPLIED TECHNOLOGY DIVISION
- Administration of Justice/Police Academy
- Adult Correctional Officer Core
- Basic Police Academy
- Basic Supervisors
- Juvenile Correctional Officer Core
- Probation Core Course
- Requalification Basic Course
- Safety Dispatcher's Basic Course
- Aerospace Studies
- Applied Technology
- Architecture
- Basic Architectural Contract Document
- Basic Architectural Design
- Basic Architectural Office Practice
- Basic Architectural Skills 1
- Basic Architectural Skills 2
- Basic Digital Architecture
- Automotive Collision Repair Technology
- Auto Collision Repair CTC
- Automotive Mechanics CTC
- Automotive Technology
- Alternative Fueled Vehicle
- Hybrid Electric Vehicle
- Auto Tech: GM ASEP
- Chassis Technician
- Chassis Technician I
- Chassis Technician II
- Emission Technician
- Emission Technician I
- Emission Technician II
- Powertrain Technician
- Powertrain Technician I
- Powertrain Technician II
- Computer Aided Drafting and Design
- 2D CAD Technician
- 3D CAD Technician
- 3D CAD/CAM
- CAD Technician I
- Electrical Systems Technology
- Advanced Photovoltaic Technician
- Automation Control Technician
- Biomedical Tech
- CISCO Certification
- Control Systems
- Facility Controls
- Industrial Automation 1
- Low Voltage
- Network Security
- Networking/Computer Technician
- Wireless Networks
- Fire Technology
- Basic Fire Academy
- Emergency Medical Technician I
- Emergency Medical Technician I, Refresher
- Firefighter II
- Paramedic
- Graphic Communications
- Digital Media Option
- Digital Video Option
- Graphic Communications
- Graphic Design Option
- Visual Communication
- Web Design

Heating, Ventilation, & Air Conditioning
- HVAC Technology I
- HVAC Technology II
- HVAC Technology III
- HVAC Wireless Control I
- Industrial Technology
- Industrial Training, Warehouse and Distribution Careers
- Maintenance Mechanic CTC
- Manufacturing Mechanic CTC
- Photography
- Commercial Photography
- Digital Photography
- Fine Art Photography
- Photojournalism
- Professional Photography
- Welding Technology
- Metal Fabrication Option
- Multi-Process
- Pipe and Structural Steel Certificate Option
- Welding Design and Fabrication

BUSINESS DIVISION
Accounting
- Computerized Accounting for the Workplace
- Business Administration
- 21st Century Work Competencies
- Entrepreneurial Ventures
- Human Resources Management
- Professional and Civic Behaviors
- Retail Management
- Business & Technology
- Business Office English
- Business Office Math Fundamentals
- Clerical Training
- Computer Applications Software
- Foundations for the Office Professional
- Medical Office Assistant
- Microsoft Office Foundations
- Microsoft Word
- Office Professional I
- Office Professional - Executive Assistant Emphasis
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Allied Health, Physical Education and Athletics Division

The Allied Health, Physical Education and Athletics Division offers courses for fulfilling requirements in a number of occupational programs such as:

- Dental Hygiene
- Medical Assistant - Clinician
- Health Information Technology
- Radiologic Technology
- Registered Nursing
- Respiratory Care Practitioner
- Autism Technician

The Allied Health, Physical Education and Athletics Division also offers a variety of courses and programs in health science, physical education, recreation and recreation leadership. Such courses may be taken for general interest and/or degree requirements. The courses are listed on pages 261, 392 and 403.

Health Care Career Programs

All students must complete the appropriate Academic Summary Form for consideration for acceptance into most health care career programs. Registered Nursing also utilizes a multi-criteria screening process via an online application. Students must also meet the normal admission requirements as fully matriculated regular students at Fresno City College. See page 14 for a list of these requirements.

For impacted programs (programs having more applicants than seats available), applicants will be required to have all their application requirements completed before their names can be submitted for lottery selection. Those interested in entering one of these programs are urged to obtain information from a health career counselor so that they might make a more realistic evaluation of their chances for being accepted. Students must meet specific prerequisites for the program of their choice.

Upon entry to the Dental Hygiene, Radiologic Technology, Registered Nursing, Respiratory Care Practitioner, Health Information Technology and Medical Assistant — Clinician programs, students may be required to obtain a background check.

Due to changes expected from the state, students will be considered for entry into a health care career program under the requirements listed in the current catalog or catalog supplement. Although the catalog is a one-year catalog, a catalog supplement is published each year. It is important that students understand that the college will use the criteria for program eligibility based on the catalog or the catalog supplement in effect at the time of submission of the Academic Summary Form, not the initial registration at Fresno City College.

See academic requirements under the appropriate health career program in the college catalog and/or catalog supplement. Additional information may be obtained by contacting a Fresno City College health career counselor. To keep current on changes, students are expected to contact a health career counselor on a regular basis or to attend an allied health information session.
The Applied Technology Division provides experiences which serve to guide students in their transition from the classroom to employment, employment upgrade and transfer to other education institutions.

Counselors and educational advisors are available to assist students in planning specific courses of study. To ensure that courses are in keeping with current occupation and industrial practices and requirements, joint management and employee advisory committees are set up in each occupation in which courses are offered.

Major fields of study offered by this division include heating, ventilation, & air conditioning (HVAC), architecture, automotive collision repair technology, automotive technology, General Motors Technology GM ASEP/MOPAR, Cisco, computer aided drafting and design, computer aided manufacturing, construction, electrical systems technology, graphic communications, networking/computer technician, photography, and welding/metal fabrication.

Trade preparatory majors in the Applied Technology Division must complete the specified courses as outlined for each program.

Courses required for each degree program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from Applied Technology division counselors and/or faculty advisors in planning their certificate program.

Certificate of Achievement

A certificate of achievement will be awarded to students who have completed the designated subjects in the program major.

Courses required for each certificate program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from Applied Technology division counselors and/or faculty advisors in planning their certificate program.

Certificates

A certificate will be awarded to students who have completed the designated subjects in the training program with a minimum “C” grade.

Work Experience Education

Through the cooperation of Fresno City College, industry and the community, students may work toward graduation while employed in trade, industrial or diversified occupations.

These courses are numbered 19. College credit is granted for the internship and/or work experience (paid and unpaid). Inquire through your instructor or see an Applied Technology division counselor.

Certificate of Achievement

A certificate of achievement will be awarded to students who have completed the designated subjects in the program major.

Courses required for each certificate program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from Applied Technology division counselors and/or faculty advisors in planning their certificate program.

Certificates

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Work Experience Education

Through the cooperation of Fresno City College, industry and the community, students may work toward graduation while employed in trade, industrial or diversified occupations.

These courses are numbered 19. College credit is granted for the internship and/or work experience (paid and unpaid). Inquire through your instructor or see an Applied Technology division counselor.

Associate in Science Degree

Generally, the two-year program leading to the associate in science degree provides the specialized skills and related information necessary to enable the graduate to find employment and to advance in their chosen field. Trade preparatory majors in the Applied Technology Division must complete the specified courses as outlined for each program.

Courses required for each degree program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from counselors and/or faculty advisors in planning their programs.

Associate in science degree requirements can be found under degree requirements on page 36.

Career & Technology Center and Workforce Development

Located off Fresno City College’s main campus, the Career & Technology Center offers a learning environment for practical hands-on education. Year-round registration is in effect for a variety of noncredit, open-entry classes. Counseling and job placement services are available. CTC is located at 2930 E. Annadale Avenue, Fresno. For a complete listing of classes, call (559) 265-5700.
Courses and Programs

Most classes run six hours a day, five days per week, for the number of weeks indicated. Enrollment is taken on an open-entry basis, and class beginning and ending dates are calculated for each individual enrollee. Students are required to attend an orientation before being allowed to register.

A student may not register for a course subsequent to another course without having first successfully met the performance requirements of the former course. Partial credit will not be given to students who do not complete a course/program.

Satisfactory Progress Standards

Satisfactory Progress

State law requires students to maintain satisfactory progress while enrolled at a community college. Students who do not complete courses in which they enroll, will be penalized as follows:

Placement on Progress Probation

A student will be placed on progress probation if:

1. The student’s absences total 30 hours in Automotive Collision Repair, Engine Performance, Maintenance Mechanic; 20 hours in Engine Repair, 10 hours in Industrial Training

OR

2. The student fails to maintain a “C” average between monthly progress reports.

Removal from Progress Probation

A student put on progress probation because of excessive absence (30 accumulated hours) will remain on progress probation until completion of the program. Those students on academic probation (below a “C” average) shall be removed from progress probation if they improve their overall grade to a “C” average by the end of the next monthly report.

Program Dismissal

A student who has been placed on progress probation shall be subject to dismissal if:

1. Their accumulated absence hours total 60 in Automotive Collision Repair, Engine Performance, Maintenance Mechanic; 40 in Engine Repair; 17 in Industrial Training

OR

2. Their monthly grade remains below “C” for two consecutive months.

Readmission Following Progress Dismissal

A student who has been dismissed because of progress probation must petition for readmission.

Following the first dismissal, under District standards, a student will not be admitted to school until one cycle of the class has elapsed. If a student fails to complete the course following their initial dismissal, the student shall be dismissed for two cycles of the course. If the student fails to complete the course after the second dismissal, they shall be dismissed again. The third dismissal shall be considered permanent.

Veterans are required to complete the course/program for full benefit payment.

Certificate of Achievement

A certificate of achievement will be awarded to students who have completed the designated subjects in the program major.

Courses required for each certificate program are generally offered each semester but are subject to cancellation or change. Students are advised to seek assistance from their counselors and/or faculty advisors in planning their certificate program.

Certificates

A certificate will be awarded to students successfully completing the following course(s) or training program with a minimum “C” grade.

Administration of Justice

1. Adult Correctional Officer Core (AJ 280) (Major #8941)
2. Juvenile Correctional Officer Core (AJ 286) (Major #8943)
3. Post Basic Supervisor (AJ 276) (Major #8924)
4. Probation Core Course (AJ 285) (Major #8942)
5. Public Safety Dispatcher (AJ 278) (Major #8970)
6. STC Basic Supervisor (AJ 276A) (Major #8926)

Fire Technology

1. Emergency Medical Technician 1 (FIRET 131) (Major #8842)
2. Emergency Medical Technician 1 Refresher (FIRET 261) (Major #8843)
Certificates of Completion
A certificate of completion may be awarded after meeting the designated competencies in non-credit courses.

**Automotive Collision Repair**

<table>
<thead>
<tr>
<th>(Major #807V)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Collision Repair 371, Fundamentals of Welding Technology and Working Sheet Metal</td>
<td>300</td>
</tr>
<tr>
<td>Automobile Collision Repair 372, Body Work Technology</td>
<td>300</td>
</tr>
<tr>
<td>Automotive Collision Repair 373, Automotive Refinishing Technology</td>
<td>300</td>
</tr>
<tr>
<td>Program Total</td>
<td>900</td>
</tr>
</tbody>
</table>

**Automotive Mechanics**

<table>
<thead>
<tr>
<th>(Major #811V)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Mech 371, Engine Repair</td>
<td>600</td>
</tr>
<tr>
<td>Auto Mech 372, Engine Performance</td>
<td>900</td>
</tr>
</tbody>
</table>

**Industrial Training**

<table>
<thead>
<tr>
<th>(Major #852V)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Training 371, Warehouse and Distribution Careers</td>
<td>90</td>
</tr>
<tr>
<td>Industrial Training 372, Warehouse and Distribution Careers</td>
<td>90</td>
</tr>
<tr>
<td>Program Total</td>
<td>180</td>
</tr>
</tbody>
</table>

**Maintenance Mechanic**

<table>
<thead>
<tr>
<th>(Major #806V)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maint Mech 370, Weld/Machine Shop</td>
<td>300</td>
</tr>
<tr>
<td>Maint Mech 371, Hydraulics/Pneumatics</td>
<td>300</td>
</tr>
<tr>
<td>Maint Mech 372, Electrical Fund</td>
<td>300</td>
</tr>
<tr>
<td>Program Total</td>
<td>900</td>
</tr>
</tbody>
</table>

**Manufacturing Mechanic**

<table>
<thead>
<tr>
<th>(Major #8301)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG Mechanic 351, Intro to Manufacturing</td>
<td>9</td>
</tr>
<tr>
<td>MFG Mechanic 352A, Trade Mathematics</td>
<td>18</td>
</tr>
<tr>
<td>MFG Mechanic 352B, Programmable Controllers</td>
<td>18</td>
</tr>
<tr>
<td>MFG Mechanic 352C, Job Preparation</td>
<td>18</td>
</tr>
<tr>
<td>MFG Mechanic 352D, Technical Report Writing</td>
<td>18</td>
</tr>
<tr>
<td>MFG Mechanic 353A, Fluid Power Fundamentals</td>
<td>9</td>
</tr>
<tr>
<td>MFG Mechanic 353B, Pneumatic Fundamentals</td>
<td>18</td>
</tr>
<tr>
<td>MFG Mechanic 353C, Hydraulic Fundamentals</td>
<td>18</td>
</tr>
<tr>
<td>MFG Mechanic 354A, Power Transmission</td>
<td>9</td>
</tr>
<tr>
<td>MFG Mechanic 354B, Welding Fundamentals</td>
<td>45</td>
</tr>
<tr>
<td>MFG Mechanic 354C, Electrical Fundamentals</td>
<td>45</td>
</tr>
<tr>
<td>Program Total</td>
<td>225</td>
</tr>
</tbody>
</table>

**Apprenticeship Programs/Courses**

Apprenticeship classes and programs are organized in cooperation with the joint apprenticeship committee of the respective craft for training of apprentices approved by the State of California, Division of Apprenticeship Standards.
Admission to the Academy Programs

Admission of students into Fresno City College Peace Officers and Fire Technology Academy programs is in accordance with the "Admission of Students" from the Fresno City College catalog, page 11, with the following exceptions:

1. **Basic Police Academy**: Students must successfully complete the POST standardized Reading Comprehension and Writing Skills test and the POST Physical Agility Test, or be sponsored by a law enforcement agency. A medical exam, driver’s license check and criminal history check are mandatory. (Requires special counseling.)

2. **Advanced Officer Courses**: All Advance Officer Training courses presented by the Police Academy, the students shall meet each individual course’s prerequisites.

3. **PC 832 Courses**: Students must be able to demonstrate physical ability to use a firearm and to preform arrest and control techniques safely. Student must obtain a Department of Justice clearance for firearms possession prior to the firearms portion of this class.

4. **Basic Fire Academy**: Medical exam conducted by a California licensed physician, including resting EKG & physician’s written explanation of EKG printout. ADVISORY: eligibility for English 125 and 126 or English as a Second Language 67 and 68 recommended.

5. **Fire Instructor IB**: Completion of Fire Instructor IA.

Note: All academy units will be counted as elective credit unless otherwise designated.

The nonaffiliated students attending basic peace officer’s academies will be responsible for providing the following items (for the student’s own use): California Penal Code and Vehicle Code, an approved firearm, ammunition and leather gear, notebook, paper, pens, pencils, uniform, physical training shorts, tee-shirts, tennis shoes, white socks, sweatshirt, sweatpants, black socks, black shoes, and lunches. All Basic Police Academy students will also be responsible for payment of driving and range fees.

<table>
<thead>
<tr>
<th>FEE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Academy Range fee</td>
<td>$120.00*</td>
</tr>
<tr>
<td>Basic Academy Driving fee</td>
<td>$200.00*</td>
</tr>
<tr>
<td>P.C. 832 Range fee</td>
<td>$45.00*</td>
</tr>
<tr>
<td>Basic Academy, Module I</td>
<td>$45.00*</td>
</tr>
<tr>
<td>Basic Academy, Module I Driving fee</td>
<td>$200.00*</td>
</tr>
<tr>
<td>Basic Academy, Module II Range fee</td>
<td>$60.00*</td>
</tr>
<tr>
<td>Basic Academy, Module III Range fee</td>
<td>$45.00*</td>
</tr>
<tr>
<td>Basic Academy, Module III Driving fee</td>
<td>$50.00*</td>
</tr>
</tbody>
</table>

All courses conducted through the Police Academy Program have in-class registration.

*Range fees are subject to change.
The Business Division at Fresno City College is composed of five departments: Accounting, Business Administration, Business & Technology, Computer Information Technology/Decision Sciences, and Paralegal. Each department offers multiple degree and certificate programs to meet the educational needs of our students.

In addition to traditional, semester length classes, we offer a 25-month evening program for working adults to achieve an associate in arts in Business Administration, and a number of short-term certificate programs.

The Business Division is equipped to offer the following opportunities for our students:

- Lower division courses for students planning to transfer to four-year colleges and universities.
- Short, intensive programs for those who wish to specialize in one area with immediate employment in mind.
- Career training and retraining.
- Electives for students in other divisions.

The regular two-year program with a transfer objective leads to the associate in arts degree. Occupational preparation, on the other hand, demands in-depth concentration over a like period of time culminating in an associate in science degree. A certificate of achievement is available in all programs for those who choose not to complete all of their general education requirements and to take only the classes required by the major.

**Classroom to Worksite Collaboration**

The Business Division faculty and staff coordinate the school and the job by bringing to the classroom the latest information on business methods and employers’ needs. Leaders from business are invited to the class as guest speakers and counsel students concerning career opportunities, standards, work habits and attitudes. We also work with local businesses to further meet the educational needs of their employees.

**Employment Experience**

Full-time faculty work with students to secure part-time cooperative work experience as part of their program.

Students planning to seek employment upon graduation from Fresno City College, as well as those who plan a short, intensive training period, will find the suggested curricula on the following pages a guide in planning their courses.

**The Future**

The suggested courses of study offered by the Business Division prepare the student for transfer to a four-year university and/or immediate employment in business.

**Associate in Arts Degree**

The associate in arts degree is offered primarily for transfer students in the area of business administration. Associate degree requirements are listed on page 36.

**Associate in Science Degree**

The associate in science degree programs, as listed in the following pages, show the designated course requirements and the departmental recommendations for elective courses. These electives are supportive and carry a strong recommendation. Associate degree requirements are listed on page 36.

**Certificate of Achievement**

For a listing of certificate of achievement programs see page 86.

**Certificates**

Certificate programs are listed below.

**Business Administration**

1. 21st Century Work Competencies (BA 10, 33) (Major #2035)
2. Business Finance and Accounting (ACCTG 4A, 4B; BA 35) (Major #2031)
3. Business Finance and Investments (BA 34, 35) (Major #2271)
4. Entrepreneurial Ventures (BA 10, 24, 27, 30, 51, 52) (Major #2041)
5. Human Relations and Communications (BA/BT 5, BA 33) (Major #2510)
6. Human Resource Management Assistant (BA 31, 33, BT 9/BT 25/CIT 20) (Major #2052)
7. Human Resource Management and Human Relations (BA 31, 33) (Major #2520)
8. Management and Supervision (BA 40, 43) (Major #2182)
9. Personal Finance and Investments (BA 30, 34) (Major #2032)
10. Professional and Civic Behaviors (BA 101, 102, 103, 104) (Major #2036)
11. Small Business Management (BA 38, 51) (Major #2030)
12. Real Estate Course Qualification (ACCTG 4A/BA18, RE 40, 41) (Major #2192)
**Business and Technology**

1. Business Office English (BT 5, 13, 112) (Major #2372)
2. Business Office Math Fundamentals (BT 104, 115) (Major #2328)
3. Clerical Training (BT 370A, 370B) (Major #247V)
4. Computer Applications Software (BT 9, 10, 33, 106) (Major #2202)
5. Foundations for the Office Professional (BT 28, 106, 116, 121, 127, 134) (Major #2326)
6. Microsoft Office Foundations (BT 24/9, 28, 126/9, 127, 130/9) (Major #2325)
7. Microsoft Word (BT 28, 29) (Major #2323)

**Computer Information Technology**

1. Android Application Developer (CIT 15, 63, 65) (Major #2730)
2. Apple iOS Developer (CIT 69, 70) (Major #2731)
3. Cyber Technician Specialist (CIT 48A, 48B) (Major #2751)
4. Information Security I (CIT 40, 57, 58B, 58C) (Major #2714)
5. Information Security II (CIT 50, 58D, 58E, 58F) (Major #2715)
6. Preparation in Microsoft Office (BT 28, 29, 127; CIT 20, 23, 24, 26) (Major #2710)
7. System Support Specialist (CIT 40, 45, 48B; 60) (Major #2723)
8. Web Page Development (CIT 82, 85, 93) (Major #2741)

**Marketing**

1. Advertising (MKTG 10, 12, 21) (Major #2113)
2. Fashion Merchandising (MKTG 14, 17, 22) (Major #2152)
3. Personal Sales (BA 33, MKTG 10, 11) (Major #2114)
4. Retailing (BA 33, MKTG 10, 14) (Major #2116)

**Co-Curricular Activities**

As an integral part of the instructional program, the Business Division supports three co-curricular groups. The effort is represented by groups such as the Paralegal Student Organization (Paralegal majors), the Collegiate Entrepreneurs Organization (CEO) and the CIT Zero Computer Technology Club. Students have the opportunity to participate in service-oriented activities and field trips that benefit both the college and community. These student organizations are designed to encourage sharing of common goals and to promote further development of knowledge and skill sets. In addition, co-curricular activities provide a medium through which leadership qualities can be taught and the laboratory in which they can be tested, practiced and proven. Membership is open to students with an interest in the subject, and active participation is highly encouraged.

Nontransfer Students

The suggested courses of study offered by the Business Division prepare the student for immediate employment in business.
Fine, Performing, and Communication Arts Division

The Fine, Performing, and Communication Arts Division offers a rich variety of courses to acquaint students with the arts. The courses in the division examine the breadth of human experience through the study, analysis, and discussion of art, film, music, theater, and interpersonal communication.

Associate in Arts Degree
- Art
- Communication for Transfer
- Dance
- Journalism
- Journalism for Transfer
- Music for Transfer
- Music, Guitar
- Music, Instrumental
- Music, Vocal
- Theatre Arts
- Theatre Arts for Transfer

Associate in Science Degree
- Music, Commercial Music

Certificate of Achievement
- Studio Art
- Music, Commercial Music

Communication Arts

The Communication Arts Department offers courses in film, communication, and journalism. Students may select courses to fulfill general education requirements and courses for majors in communication and journalism. Students enrolled in the journalism program have the opportunity to gain valuable experience in the production of the college newspaper, The Rampage and the college magazine, IntenseCity.

The Forensic program at Fresno City College has long been recognized as one of the most outstanding programs among community colleges in both the state and the nation. Students in the program compete in several tournaments during the academic year, which lead to competition in the state and national tournaments for invited students.

Fine and Performing Arts

All students enrolled in communication classes have the opportunity to participate in an intramural competition held during Showcase, the Fresno City College open house in the spring.

Fine and Performing Arts

Students have the opportunity to complete lower division requirements for transfer in art, music, theatre arts, and dance. In addition to an examination of the creative process and an introduction to theoretical models, students are able to participate in several venues that spotlight student work.

Art Space Gallery

A juried exhibition of student work is held and prizes are awarded during the spring semester.

Music

Students have several options to participate in performance groups, including the Fresno City College Jazz Band, Concert Band, City Singers, and College Choir.

Dance

Original works by students and faculty are staged twice during the academic year. Students may also be invited to participate in the American College Dance Festival during the spring semester.

Theatre Arts

Students gain valuable experience in all facets of production by participating in the staging of four productions during the year. During the spring semester the department hosts the High School Drama Festival. Students may also have an opportunity to attend the American College Theatre Festival during the spring semester.
Humanities Division

The Humanities Division offers courses which enrich students’ lives, while improving basic skills in reading and writing; courses that meet general education requirements; and courses of study to complete various associate degrees and lower division transfer requirements.

An integrated program of study in the humanities provides students with a foundation in the liberal arts that prepares them for further study in many different disciplines. The varied courses in the division examine the breadth of human experience through the study, analysis, and discussion of creative writing, composition, reading, literature, foreign languages, and philosophy in their cultural and historical contexts.

Departments

Composition and Reading
This department offers English 1A (Reading and Composition) and English 1AH (Honors Reading and Composition), along with support classes to help students develop their writing and reading skills. These include English 205 (Accelerated Reading and Composition skills), which is taken concurrently with English 1A; English 105 (Grammar and Punctuation); English 126A (Academic Reading Efficiency); and English 300 (Academic Learning and Literacy Skills). English 1A is a general education course that is required for graduation.

Foreign Language
Our Foreign Language Program offers courses in American Sign Language, Armenian, Chinese, French, German, Hmong, Japanese, Spanish, and Spanish for Native Speakers, all with emphasis on communicative competence. Students learn the necessary skills that allow them to communicate in many different situations.

Letters
Letters courses provide students with skills to analyze and appreciate great works of literature, philosophy, and the arts. In addition, our Letters Program offers creative writing courses in poetry, fiction, autobiography, and play writing.

Linguistics/English for Multi-Lingual Students
The Linguistics/EMLS Department offers two distinct programs. For English for Multi-Lingual Students needing to develop their reading, writing, and study skills, the department offers a sequential program designed to prepare students for an AA/AS degree and university transfer level courses. Additionally, the department offers linguistics courses that satisfy transfer level area requirements.

 Philosophy
In its courses and programs, the department emphasizes skills associated with careful, deliberative, and reflective thinking. We offer courses in critical thinking, ethics, metaphysics and epistemology, social and political philosophy, the history of philosophy, world religions, and logic.

Associate in Arts Degrees

English
The English degree program offers students lower division subjects they will study as English majors in four-year college or university programs and/or prepares students for entry into career options requiring expertise in English language and literature.

Philosophy
The Philosophy major develops students’ critical thinking and creative reasoning skills, enhances their ability to read complex material, and improves communication skills. These are valuable assets for transfer and career oriented students.

Spanish
The Spanish major prepares students for entry into a variety of career options requiring intermediate or better levels of fluency. The Spanish major also acquaints students with Spanish-speaking cultures.

Certificate of Achievement

Sign Language Interpreting Preparation
This program is intended to prepare students for entry-level ASL interpreting positions in a variety of settings such as schools, social service agencies and limited medical situations.
Math, Science and Engineering Division

The Math, Science and Engineering Division includes classes in the areas of study in Astronomy, Biology, Chemistry, Computer Science, Engineering, Geography, Geology, Mathematics, Natural Science, Physics, and Physical Science. The Math, Science and Engineering Division offers courses for fulfilling requirements in its own programs as well as programs offered by other divisions. Many of the courses are for students in transfer programs. These include courses, which fulfill lower division requirements for majors as well as courses taken for general education. The offering prepares students for continued study at four-year colleges and universities.

Pre-professional lower division curricula are available with majors in such fields as biology, biotechnology, chemistry, dentistry, engineering, forestry, geology, horticulture, mathematics, nursing, medicine, veterinary medicine, physics, pharmacy, and physical therapy. Honors classes are available as well.

Special classes in biology, chemistry, mathematics, and physical science are offered for students who need to develop skills in these subjects before taking more advanced courses.

The Division offers courses that satisfy the requirements of the Liberal Studies major at CSU, Fresno. The courses provide content in physical sciences (Natural Science 1A), biology (Biology 3), and geology (Geology 9).

Students interested in the sciences can participate in the Fresno City College Science and Engineering Club. Activities include seminars, numerous field experiences, as well as social outings. Students emphasizing medicine or veterinary medicine can participate in Fresno City College's Pre-Health Society.

The faculty encourages students to participate in numerous research and community activities from laboratory research to field studies. Students have participated in various summer internship programs throughout California and abroad; such as, NASA, Lawrence-Berkeley Laboratories, Forrest Service, California State Mining and Mineral Museum, and Sierra Foothills Conservancy.

Biology

The Biology Department is housed in the Science Building at the southeast corner of the campus. There is an excellent greenhouse and a natural History Museum available for tours or student use. With both the Sierra Nevada crest and the Pacific coast nearby there are numerous field trip opportunities that give the students an opportunity that is not available at many other institutions.

Chemistry

The Chemistry Department is dedicated to its goal of preparing students for a career in Chemistry and for continuing education at a four-year college or university. The department consists of ten full-time faculty plus adjuncts. The department offers a wide selection of courses that could lead to Bachelor of Science degrees in programs such as Chemistry, Chemical Engineering, Chiropractic, Medicine, Pharmacy, Biotechnology, and Biochemistry. The Chemistry department is housed in the Math, Science and Engineering Building on the Southeast side of campus.

The Chemistry Department is very proud of its individual, specialized research spaces; laboratories and classrooms; instrument labs; both PC and Mac computer facilities and equipment; audio-visual and multi-media equipment; modern instruments such as FTIR and UV-Visible spectrometers, Atomic Absorption Spectrophotometer, H-1 and C-13 FT-NMR spectrometer, and Gas Chromatograph/Mass Spectrometer.

Math, Science and Engineering Web Site Addresses

Division

Biology, Chemistry, and Mathematics
http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/chemistry.html

Sciences: Engineering, Geology, and Physics
http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/engineering.html
http://fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/geology.html
Mathematics and Computer Science

The Mathematics Department is a service department by fulfilling Fresno City College’s math graduation requirements for the AA and AS degrees, and courses for a graduation requirement for the various BA degrees offered at four-year institutions. The department provides courses for other Divisions of the college as well as for the Mathematics, Science and Engineering transfer student.

The Mathematics department program offers courses in basic arithmetic skills, as well as prerequisite courses for science, engineering, and business courses. In addition, the department offers courses for students who intend to major in mathematics at a university.

The Computer Science program at Fresno City College, which parallels the first two years offering at CSU, Fresno, stresses mathematics and programming techniques. Students planning to major in Computer Science are advised to complete Computer Science 40 and 41, along with Math 5A and 5B. Additional computer programming courses should be taken as necessary to expand the student’s programming background.

Computer Science courses include Introduction to Programming Concepts and Methodologies (CSCI 1), Discrete Mathematics for Computer Science (CSCI 26), Programming Concepts and Methodology I (CSCI 40), Programming Concepts and Methodology II (CSCI 41), and Computer Architecture and Organization (CSCI 45).

The Mathematics Department is housed in the Science Building on the Southeast side of campus.

Engineering and Physical Science

The Earth, Physical Science, and Engineering Department includes Engineering, Geology, Physics, Physical Science, and Geography. The two-year associate degree programs in these areas are primarily transfer programs.

Mathematics, physics, chemistry, and introductory engineering courses such as circuit analysis, surveying, and statics make up the bulk of the engineering classes. The classes are designed so there is a smooth transfer to the candidate’s chosen college or university.

Geology

Geology is the study of the structure, composition, and history of the earth’s crust. By examining the surface of rocks and drilling to recover rock cores, the geologist is able to determine the types and distribution of rocks beneath the earth’s surface.

Geological training is also valuable in the pursuit of rock and mineral identification, conduct of geological surveys, drawing of maps, and collecting geological data and measurements. Knowledge of geology is invaluable in predicting future geological events such as earthquakes and volcanic eruptions.

Physics

Physics, the fundamental science, conceptualizes the principles of the universe and establishes the foundation for astronomy, chemistry, and geology. The beauty of physics is in a small number of powerful concepts which expand our view of the world around us and which lead to many engineering applications from which humans derive many benefits.
Social Sciences Division

The aim of Social Sciences is to provide an appreciation of the rich diversity and the fundamental commonality of all human experience. The Social Sciences constitute studies in human behavior, both past and present, individual and collective, legal and illegal, distant and local. The intention is to search for greater social justice, personal freedom and mutual understanding. The Division is divided into six departments:

- Anthropology and Economics including: Archaeology
- Cultural and Women’s Studies including:
  - African-American Studies
  - American Indian Studies
  - American Studies
  - Asian-American Studies
  - Chicano-Latino Studies
- Women’s Studies
- History and Political Science
- Child Development and Education
- Psychology
- Criminology, Human Services, Sociology, including:
  - Culinary Arts Food and Nutrition Food Service Management

Courses offered satisfy transfer and associate degree general education requirements.

Career Training

The Social Sciences Division also offers career training in:

- Alcohol and Drug Abuse Counseling
- Archaeology Technician
- Child Development
- Child Nutrition
- Corrections
- Criminology
- Culinary Arts
- Dietary Aide
- Dietetic Service Supervisor
- Food Service Management
- Law Enforcement
- Social Work

Students may select a training program leading to a certificate, a certificate of achievement or an associate in science degree. Certificate programs require occupational courses only and vary between 6 and 40 units of coursework. The associate in science degree mandates a minimum of 60 units, consisting of the major, electives, and required courses in general education.

The Social Sciences Division is also home to the Fresno City College Anthropology Museum and the Child Development Center. It coordinates programs in Foster Care, Independent Living, and programs for foster youth.
Fresno City College is a sister institution of Reedley College and Clovis Community College within the State Center Community College District, and students may register at one institution or all institutions concurrently. As the registration procedures may differ slightly, students interested in enrolling for courses at Fresno City College should contact the Admissions Office on either campus for further information and direction.

Each college of the District offers certain programs/courses which are unique and not offered at the other campus. Following is a partial list of those programs/courses offered at Fresno City College that are not offered on the Reedley College campus:

- Administration of Justice
- Aerospace Studies
- African-American Studies
- American Studies
- American Indian Studies
- Applied Technology
- Architecture
- Asian-American Studies
- Automotive Collision Repair Technology
- Automotive Technology General Motors ASEP
- Business & Technology
- Computer Aided Drafting and Design
- Computer Aided Manufacturing
- Construction
- Cultural Studies
- Dental Hygiene
- Drafting
- Electrical Systems Technology
- Fire Technology
- Graphic Communications
- Health Information Technology
- Heating, Ventilation, and Air Conditioning
- Marketing
- Military Science
- Networking/Computer Technician
- Paralegal
- Police Academy
- Real Estate
- Radiologic Technology
- Respiratory Care

Career & Technology Center

Career & Technology Center is a significant resource to both its students and the community. CTC staff identifies job skills employers in local industry need and then provides training to help students acquire those skills. Year-round registration is in effect. Noncredit, open-entry classes are offered in:

- Auto Collision Repair
- Engine Performance
- Engine Repair
- Industrial Training/Warehouse Distribution
- Maintenance Mechanic
- Manufacturing Mechanic

For additional information, write or call the Center.

Career & Technology Center
2930 East Annadale Avenue, Fresno, CA 93725
(559) 265-5760
Reedley College

Additional programs/courses available only at Reedley College in Reedley:
- Aeronautics
- Agri-Business
- Animal Science
- Dental Assisting
- Forest/Park Technology
- General Agriculture
- Landscape Horticulture
- Mechanized Agriculture
- Natural Resources
- Office Technology
- Plant Science: Grape and Tree Fruit Management

Further information on these programs/courses can be obtained by writing or calling:

Reedley College
995 North Reed Avenue
Reedley, CA 93654
(559) 638-0300

Madera Community College Center
The Madera Community College Center is located on Avenue 12 just east of Highway 99 south of the City of Madera. The Center offers a wide variety of academic and occupational programs and opportunities for students.

Madera Community College Center
30277 Avenue 12, Madera, CA 93638
(559) 675-4800

Oakhurst Community College Center
The Oakhurst Community College Center is located in the Central Business District of Oakhurst. The various programs are taught in relocatable classrooms arranged into a small campus setting. Students can complete courses leading to an associate degree and/or transfer program.

Oakhurst Community College Center
40241 Highway 41, Building Site G, Oakhurst, CA 93644
(559) 683-3940

Clovis Community College
Clovis Community College is located at Willow and International avenues in Fresno across the street from the Clovis Unified School District Third Education Center. The college offers over 400 courses annually in 40 areas of study.

Clovis Community College
10309 N. Willow
Fresno, CA 93730
(559) 325-5200
ASSOCIATE DEGREES FOR TRANSFER

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree.

California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60 semester or 90 quarter units. To view the most current list of Fresno City College Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to http://adegreewithaguarantee.com. Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

ALLIED HEALTH

PUBLIC HEALTH FOR TRANSFER – MAJOR #8400

The Associate in Science in Public Health for Transfer is designed for students who plan to complete a bachelor’s degree in Health Science at a CSU or UC campus. An Associate in Science in Public Health focuses on competencies that include knowledge of public health models, health risk assessments, health screenings, health promotion programming, surveillance of disease outbreaks and injury prevention strategies for a community. The public health field includes disciplines such as patient health navigator, health education outreach, epidemiology, biostatistics, health services, environmental health, behavioral health, and occupational health. The Public Health Associate in Science for Transfer provides preparedness in these job related career paths. To earn the Associate in Science in Public Health for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 33 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Demonstrate the ability to comprehend and apply the multi-dimensional approach of public health sciences.
2. Identify proactive factors for disease prevention and risk factors for disease and disability.
3. Demonstrate and apply behavior-changing techniques to maximize health and wellness.
4. Demonstrate the concepts of research, program planning and evaluation strategies.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHLTH 1</td>
<td>Introduction to Public Health</td>
</tr>
<tr>
<td>BIOL 5</td>
<td>Human Biology</td>
</tr>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy, and</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>Human Physiology, or</td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>Human Anatomy &amp; Physiology I, and</td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>Human Anatomy &amp; Physiology II</td>
</tr>
<tr>
<td>CHEM 3A</td>
<td>Introduction to General Chemistry</td>
</tr>
<tr>
<td>HLTH 1</td>
<td>Contemporary Health Issue</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PSY 2</td>
<td>General Psychology</td>
</tr>
</tbody>
</table>
Select a Minimum of 3 Units from the Following: Units

AHLTH 2       Health and Social Justice ........................................... 3
ECON 40       Introduction to Microeconomics .................................. 3
ECON 50       Introduction to Macroeconomics ................................. 3
FN 40         Nutrition .................................................................. 3
HLTH 2       First Aid and Safety ................................................. 3
PSY 25        Human Sexuality ...................................................... 3

Total 33

ANTHROLOGY FOR TRANSFER
– MAJOR #7150

Anthropology is a program designed to acquaint students with human diversity through a broad approach to the study of people. Anthropology is a program designed to acquaint students with human diversity through a broad approach to the study of people including the prehistoric, biological, and cultural perspectives. Because of its wide coverage, anthropology provides a versatile background that serves as a solid foundation for careers in many fields and vocations. The Associate in Arts in Anthropology for Transfer degree is designed for students who plan to complete a bachelor's degree in Anthropology at a CSU campus. The Associate in Arts in Anthropology for Transfer degree requires (1) The completion of 60 semester 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 in the Anthropology major. (2) Obtainment of a minimum grade point average of 2.0 and the grade of C or better in all courses required for the major. Students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU) early in their program. Anthropology students should also meet with anthropology faculty about course/program offerings as soon as possible once the major has been declared in order to complete the program in a timely manner.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Demonstrate an understanding of anthropological approaches to the study of humanity: cross-cultural comparison and cultural relativity, holism, and evolutionary theory, and the uses of each.
2. Describe the breadth of anthropology and be able to characterize anthropology's distinctive methodological approaches with respect to the different subdisciplines.
3. Demonstrate understanding of human cultural diversity and biological variation through time.

REQUIRED CORE COURSES (3 courses or 9 units minimum) Units

ANTHRO 1       Biological Anthropology ............................................ 3
ANTHRO 2/2H     Cultural Anthropology, or Honors Cultural Anthropology ................................. 3
ANTHRO 4       Introduction to Archaeology .................................... 3

Select 3-4 units from the following: Units

ANTHRO 1L      Biological Anthropology Laboratory .......................... 1
ANTHRO 3       Archaeology and World Prehistory ............................ 3
ANTHRO 8       Language and Culture, or
LING 10       Introduction to Language ......................................... 3
ANTHRO 13      Anthropology of Magic, Witchcraft, and Religion .... 3

Select 3-8 units from the following courses or any courses not used in the section above: Units

BIOL 20       Human Anatomy ......................................................... 4
GEOL 1        Physical Geology ........................................................ 4
GEOL 9        Introduction to Earth Science ................................. 4
PSY/MATH 42   Statistics for the Behavioral Sciences, or
MATH 11       Elementary Statistics .................................................. 4

Select 3-4 units from the following courses or any course not used in the sections above: Units

AFRAM 1       Introduction to African American Studies .................. 3
AMIND 31      American Indian Culture ............................................. 3
AMST 10       American Pluralism: A Search for Common Ground in a Multicultural Society .......... 3
ANTHRO 12     Visual Anthropology: Introduction to Ethnographic Film ........................................... 3
ANTHRO 15     Laboratory Methods in Archaeology ......................... 4
ANTHRO 16A    Field Archaeology I .................................................. 2
ANTHRO 16B    Field Archaeology II .................................................. 2
ANTHRO 24     Doing Archaeology: Hands-On! .............................. 1.5
ANTHRO/CLS 28 Ancient Mexico ..................................................... 3
ASAMER 15     Introduction to Asian-Americans ............................... 3
ASL 5         Deaf Culture ............................................................... 3
CLS 11        Introduction to Chicano-Latino Studies ..................... 3
JOURN 16      Race, Gender, and the Media ...................................... 3
WSTS 10       Changing Roles of Women .......................................... 3
ART

STUDIO ARTS FOR TRANSFER – MAJOR #5250

An Associate in Arts in Studio Arts for Transfer is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. An Associate in Arts in Studio Arts for Transfer is a great way to develop critical and creative problem solving skills, enhance an ability to analyze complex visual information, and improve communication skills. These skills will be valuable as a transfer student to a four-year institution, whether you major in art or some other field, and will enhance your preparation for a wide range of career opportunities. To earn the Associate in Arts in Studio Arts for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 24 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Apply knowledge of art fundamentals in order to identify, formulate, and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally and in writing.
4. Understand the impact of art making in a global and societal context.

REQUIRED CORE (12 Units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3</td>
<td>Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 4</td>
<td>Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 5/5H</td>
<td>Art History Renaissance to Modern, or</td>
<td>3</td>
</tr>
<tr>
<td>ART 6/6H</td>
<td>Honors Art History Renaissance to Modern</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST A: Select One (3 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 5/5H</td>
<td>Art History Ancient to Medieval, or</td>
<td>3</td>
</tr>
<tr>
<td>ART 55</td>
<td>Introduction to Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 60</td>
<td>Art of the Ancient Americas</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST B: Select three courses (9 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 8</td>
<td>Beginning Figure Drawing and Anatomy, or</td>
<td>3</td>
</tr>
<tr>
<td>ART 17</td>
<td>Intermediate Drawing, or</td>
<td></td>
</tr>
<tr>
<td>ART 18</td>
<td>Intermediate Figure Drawing and Anatomy</td>
<td>3</td>
</tr>
</tbody>
</table>

ART 3, ART 4, and ART 7 should be taken before the other courses in the major.

BIOLOGY FOR TRANSFER

– MAJOR #6082

The goal of the Associate in Science in Biology for Transfer program at Fresno City College is to prepare students to seamlessly transfer into a CSU baccalaureate program in Biology. The Associate in Science in Biology for Transfer program at Fresno City College may also prepare students to transfer into a UC baccalaureate program in Biology. An Associate in Science in Biology for Transfer is comprised of the core set of introductory Biology and Mathematics courses that assist a student to develop critical thinking and analytical reasoning skills and establish conceptual frameworks for understanding biological phenomena. To earn the Associate in Science in Biology for Transfer, students must complete 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.* ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.
ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Understand the function of organic molecules in biological systems and relate organelle structure to cellular function.
3. Understand the structure and function of genetic material and apply the principles of genetics as they relate to organisms.
4. Understand the biodiversity of life on earth based on modern classification systems.
5. Understand the ecological relationships between organisms and the environment, and the impact of human activity on ecological systems.
6. Understand the scientific evidence for evolution and explain the mechanisms leading to evolutionary change over time.

REQUIRED CORE

BIOL 11A/11AH  Biology for Science Majors I, or Honors Biology for Science Majors I ............ 5

CHEMISTRY & MATH REQUIREMENTS

CHEM 1A  General Chemistry, and
CHEM 1B  General Chemistry and Qualitative Analysis .................................................. 10
MATH 5A  Mathematical Analysis I .................................................... 5

SELECT ONE SEQUENCE:

BIOL 11B  Biology for Science Majors II, or ....................... 5
BIOL 4  Principles of Zoology, and
BIOL 6  Principles of Botany ................................................. 10

SELECT ONE SEQUENCE:

PHYS 2A  General Physics 1, and
PHYS 2B  General Physics 2, or ......................................... 8
PHYS 4A  Physics for Scientists and Engineers, and
PHYS 4B  Physics for Scientists and Engineers .......................... 8

BUSINESS ADMINISTRATION FOR TRANSFER - MAJOR #2049

Business is an exciting major for students with a variety of interests and career goals including options in entrepreneurship, marketing, business law, management, computer information systems, accounting, and finance. The Associate in Science in Business Administration for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Science in Business Administration degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students must consult with a counselor when planning to complete the degree for additional information on university admission and transfer requirements. In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Apply knowledge of major business functions (accounting, quantitative, law, computer, and business concepts) and its methodologies and ethical applications in common business situations.
2. Apply professional behaviors in both business and personal situations.

REQUIRED CORE

ACCTG 4A  Financial Accounting ............................................ 4
ACCTG 4B  Managerial Accounting ........................................ 4
BA 18  Business and the Legal Environment ............................. 4
CIT 15  Computer Concepts .................................................. 3
ECON 40/40H  Introduction to Microeconomics, or Honors Introduction to Microeconomics........ 3
ECON 50/50H  Introduction to Macroeconomics, or Honors Introduction to Macroeconomics........ 3

Choose 2 of the following:

BA 10/10H  Introduction to Business, or Honors Introduction to Business...................... 3
DS 21  Finite Mathematics .................................................... 3
DS 23  Business Statistics ..................................................... 3

*May be used to fulfill General Education requirements.
CHILD DEVELOPMENT

EARLY CHILDHOOD EDUCATION FOR TRANSFER
— MAJOR #5605

Majoring in Child Development prepares students for jobs in a variety of early care and education settings as well as in related fields working with children and families. The associate in science in Early Childhood Education for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the associate in science transfer degree, students must complete 60 semester or 90 quarter units that are eligible for transfer to the CSU including either IGETC or CSU GE Breadth and at least 18 units, as defined by the community college, in a major or area of emphasis. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education of young children.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children’s social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.

REQUIRED COURSES

CHDEV 1 Principles and Practices of Teaching Young Children ............................................................ 3
CHDEV 3 Introduction to Curriculum ............................................................ 3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education ............................................................ 3
CHDEV 15 Diversity and Culture in Childhood Education Programs ............................................................ 3
CHDEV 20 Observation and Assessment ............................................................ 3
CHDEV 30 Child, Family and Community ............................................................ 3
CHDEV 37A Early Childhood Practicum ............................................................ 3
CHDEV 39 Child Growth and Development ............................................................ 3

Total 24

COMMUNICATION FOR TRANSFER
FORMERLY SPEECH — MAJOR #5432

The Associate in Arts in Communication Studies for Transfer degree program is designed to prepare students for further study or employment in fields requiring effective and ethical human communication. Communication courses focus on how people use messages to generate meanings within and across various contexts, cultures, channels and media.

The Associate in Arts in Communication Studies for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the Comm. Studies AA-T degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including (i) the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements, and (ii) the 18 semester units specified by the Communication Studies degree. These requirements must be obtained with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate understanding of core communication theories and principles.
2. Organize, develop, and deliver an effective presentation.
3. Critically evaluate various communication situations.

REQUIRED CORE COURSES

COMM 1 Introduction to Public Speaking ............................................................ 3
COMM 2 Interpersonal Communication ............................................................ 3
COMM 4 Persuasion ......................................................................................... 3
COMM 8 Group Communication ........................................................................ 3
COMM 25 Argumentation ................................................................................... 3

Total 15

Choose 3 units from the following:

COMM 20 Community Involvement ............................................................ 2-3
COMM 26 Intercollegiate Forensics Laboratory ................................................ 1-3
JOURN 1 Introduction to Mass Communication ............................................. 3
JOURN 3 Newswriting ......................................................................................... 3
CRIMINOLOGY

ADMINISTRATION OF JUSTICE FOR TRANSFER
– MAJOR #7750

Administration of justice is the study of the causes, consequences, and control of crime. The program leading to the Associate in Science in the Administration of Justice for Transfer (AS-T) is designed to acquaint students with the principles and practices of criminal justice systems in America. The curriculum allows for the development of depth in one of the subject's subsystems (law enforcement, juvenile, courts, or corrections), and also gain familiarity with the basics of all areas. It is both academic and professional in that it is an interdisciplinary attempt to relate intellectual issues and practitioner perspectives to the challenge of crime in a free society. It provides the information necessary for employment with a related agency and/or transfer to a college or university. Those completing the AS-T in Administration of Justice will be able to transfer to the California State University System, and be prepared to study in Administration of Justice, Law Enforcement, Correctional Administration, Social Science, and Pre-Law. Upon completion students will be prepared to pursue a BA/BS in Criminal Justice. To earn the transfer degree students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Reflect critically on developments in criminal justice policy and the relationship of those policies to the wider political and social environment.
2. Compare and evaluate diverse and competing arguments in disciplinary (justice system) and interdisciplinary contexts.
3. Demonstrate knowledge of the history, structure and processes of law enforcement, the judicial system, the correctional system, and juvenile justice system.
4. Define and utilize key terms, concepts, and theories in the criminal justice system.
5. Interpret, assess, and compare competing types of evidence and data.
6. Effectively communicate orally and in writing the results of their analysis and conclusions.

REQUIRED CORE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 1</td>
<td>Introduction to Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>Select six units from the following: Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRIM 3</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 4</td>
<td>Principles &amp; Procedures of the Justice System</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 5</td>
<td>Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 8</td>
<td>Criminal Investigation</td>
<td>4</td>
</tr>
<tr>
<td>CRIM 9</td>
<td>Crime Scene Forensic Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 11</td>
<td>Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 20</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
</tbody>
</table>

ECONOMICS FOR TRANSFER
– MAJOR #2020

The Associate in Arts in Economics for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. This degree will acquaint students with the fundamentals of economic thinking and the principle concepts and theories of macroeconomics and microeconomics. Additionally, the degree will offer students the math and statistics preparation required for upper division coursework in economics. To earn the Associate in Arts in Economics for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 13</td>
<td>The Constitution and Your Individual Rights</td>
<td>3</td>
</tr>
<tr>
<td>MATH/PSY 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
<td></td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>General Psychology, or Honors General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1A</td>
<td>Introduction to Sociology, or Honors Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Understand and apply basic economic methodology to describe, analyze and explain human behavior and societal challenges.
2. Apply principle microeconomic and macroeconomic concepts, theories and models to describe, analyze and explain relevant economic issues.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Honors Introduction to Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Honors Introduction to Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>MATH 5A</td>
<td>Elementary Statistics</td>
<td>5</td>
</tr>
<tr>
<td>MATH 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
<td>4</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics, or</td>
<td>3</td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>Choose two of the following courses</td>
<td>Units</td>
<td></td>
</tr>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 4B</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>MATH 5B</td>
<td>Mathematical Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 6</td>
<td>Mathematical Analysis III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 21</td>
<td>Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 26</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total 20-23</td>
</tr>
</tbody>
</table>

EDUCATION

ELEMENARY TEACHER EDUCATION FOR TRANSFER – MAJOR #5920

The Associate in Arts in Elementary Teacher Education for Transfer Degree is designed for students planning to transfer to a four-year university ready to continue for a bachelor's degree in Liberal Studies and a preliminary Multiple Subject Elementary Teaching Credential. To earn the Associate in Arts in Elementary Education for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. California teaching credential requirements are subject to change; consult with a counselor each semester to ensure compliance with state regulations and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Recognize and value the importance of maintaining a healthy and physically active lifestyle at the elementary school level.
2. Demonstrate a knowledge of student learning styles and abilities and their role in individualizing instruction by explaining and applying the principles of differentiated instruction and pedagogy.
3. Discuss historical influence and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse needs, abilities and backgrounds.

PROGRAM REQUIREMENTS

Required 47 units of core courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3</td>
<td>Introduction to Life Science</td>
<td>4</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 30</td>
<td>Introduction to Teaching</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>Reading and Composition, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Reading and Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 1B</td>
<td>Introduction to the Study of Literature</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4A</td>
<td>World Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4B</td>
<td>World Geography</td>
<td></td>
</tr>
<tr>
<td>GEOL 9</td>
<td>Introduction to Earth Science</td>
<td>4</td>
</tr>
<tr>
<td>HIST 11</td>
<td>History of the United States to 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 20</td>
<td>World History I, to 1600</td>
<td>3</td>
</tr>
<tr>
<td>MATH 10A</td>
<td>Structure and Concepts in Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>NATSCI 1A</td>
<td>Integrated Science: Physics and Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>POLSCI 2/2H</td>
<td>American Government, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

List A: Select 1 course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 3/3H</td>
<td>Critical Reading &amp; Writing, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Critical Reading &amp; Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2!</td>
<td>Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

List B: Select 1 course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 5/5H</td>
<td>Art History Ancient to Medieval, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Art History Ancient to Medieval</td>
<td>3</td>
</tr>
<tr>
<td>ART 6/6H</td>
<td>Art History Renaissance to Modern, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Art History Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>MUS 12</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>TA 30</td>
<td>Theatre Appreciation</td>
<td>3</td>
</tr>
</tbody>
</table>
ENGLISH FOR TRANSFER – MAJOR #5305

The Associate in Arts in English for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. A degree in English is considered a rigorous, complementary education for careers in the legal field, editing, interpreting, translation, and teaching at the K-12 and college levels. To earn the Associate in Arts in English for Transfer degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Read and critically evaluate college-level material from various sources through analysis and synthesis of information.
2. Write appropriately documented argumentative essays and research papers to deal with the ideas by definition, evaluation, interpretation, and persuasion.
3. Analyze and respond in writing to a variety of literature, including short fiction, poetry, drama, novels, and other genres, concerning thematic, rhetorical, and symbolic elements.
4. Write about and analyze the various literary elements such as plot, characterization, setting, voice, meter and tragedy in selected works.
5. Demonstrate an understanding of the importance of the assigned works to various time periods and cultures, and to literary tradition.

MAJOR CORE

English 1A/1AH is a prerequisite to major core courses; it also meets writing/reading competency and general education area D1.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1B</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3/3H Checkmate Reading and Writing, or Honors Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
</tbody>
</table>

MAJOR COURSE OPTIONS - Section A

Select one of the course sequences (6 units total) from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 44A World Literature to the Renaissance, and</td>
<td></td>
</tr>
<tr>
<td>ENGL 44B World Literature since the Renaissance, or</td>
<td></td>
</tr>
<tr>
<td>ENGL 46A English Literature to 1800, and</td>
<td></td>
</tr>
<tr>
<td>ENGL 46B English Literature from 1800 to the Present, or</td>
<td></td>
</tr>
<tr>
<td>ENGL 48A Introduction to American Literature to 1865, and</td>
<td></td>
</tr>
<tr>
<td>ENGL 48B Introduction to American Literature 1865 to the Present</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
</tr>
</tbody>
</table>

MAJOR COURSE OPTIONS - Section B

Select either six (6) from Section B, or three (3) units from Section B and three (3) units from Section C (Courses taken to meet Section A above cannot be used to fulfill Section B):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 14 Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 15A Creative Writing: Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 15B Creative Writing: Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL/TA15C Creative Writing: Playwriting</td>
<td>3</td>
</tr>
<tr>
<td>ENGL/AFRAM 17 African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL/ASAMER 20 Asian American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL/HUM 42 Classic Myths</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 44A World Literature to the Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 44B World Literature since the Renaissance</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 45 Contemporary World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 46A English Literature to 1800</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 46B English Literature from 1800 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 48A Introduction to American Literature to 1865</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 48B Introduction to American Literature 1865 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>LING 10 Introduction to Language</td>
<td>3</td>
</tr>
</tbody>
</table>

SECTION C

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 12 The Bible as Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 15D Creative Writing: Creative Nonfiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL/WSTS 36 Women’s Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 40 Themes in Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 47 Introduction to Shakespeare</td>
<td>3</td>
</tr>
</tbody>
</table>
GEOLOGY FOR TRANSFER - MAJOR #6070

Geology is a useful major for students with a variety of interests and career goals in the earth sciences including geology, hydrogeology, astrogeology, paleontology, mineralogy, engineering geology, geophysics, geochemistry, petroleum geology, oceanography and environmental science. The Associate in Science in Geology for Transfer program is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Science in Geology for Transfer program, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 units within the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students must have a minimum grade point average of 2.0. Students must earn a C or better in all courses required for the major.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Identify distinguishing characteristics, properties, and origin of common rocks and minerals.
2. Explain the processes of plate tectonic theory and identify associated geologic features and events.
3. Determine the age relationships of rocks and fossils using various dating techniques.

CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1B</td>
<td>General Chemistry and Qualitative Analysis</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 1</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 2L</td>
<td>Historical Geology Lab</td>
<td>1</td>
</tr>
<tr>
<td>MATH 5A</td>
<td>Mathematical Analysis 1</td>
<td>5</td>
</tr>
<tr>
<td>MATH 5B</td>
<td>Mathematical Analysis 2</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes:
Additional recommended courses (not part of degree)
- Physics 4A and Physics 4B (8 units) or (see requirements of 4 year institution)
- Physics 2A and Physics 2B (8 units)
- Biology 3 (4 units)
- Geology 3 (1-2 units)
- Geology 11 (1-2 units)

GLOBAL STUDIES

GLOBAL STUDIES FOR TRANSFER – MAJOR #7740

The Associate in Arts in Global Studies for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus, to include Global Studies, Global Politics, International Relations, International Studies and Comparative Government. This degree will acquaint students with the interdisciplinary field of global studies and introduce students to various global issues with a focus on the analysis of causes and solutions. To earn the Associate in Arts in Global Studies for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Explain the various meanings of globalization and identify regional differences.
2. Explain recurring and emerging global issues from a historical and interdisciplinary perspective.
3. Critically evaluate the effectiveness of national, regional and international efforts to solve problems associated with global issues.

REQUIRED CORE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLST 1</td>
<td>Introduction to Global Studies</td>
<td>3</td>
</tr>
<tr>
<td>GLST 2</td>
<td>Global Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

List A: Select five courses from at least four of the following areas.

Area 1: Culture and Society
- ANTHRO 2 Cultural Anthropology          | 3
- HIST 23 World History II, since 1500    | 3

Area 2: Geography
- GEOG 1 Physical Geography              | 4
- GEOG 2 Cultural Geography              | 3
- GEOG 4A World Geography, and
- GEOG 4B World Geography                | 6

Area 3: Economics
- ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics | 3
- ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics | 3
HISTORY FOR TRANSFER – MAJOR #7380

History is our changing perspective on the past. Historians attempt not only to understand the causes and significance of human actions in the past but also to interpret those past actions to others, through teaching, publications, lectures, exhibits, documentaries, and conversations. Knowledge of history provides insight into human nature, enhances our understanding of the present, and guides choices for the future. The Associate in Arts in History for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the Associate in Arts in History for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 units within the major, with a minimum GPA 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. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Analyze and evaluate the validity and significance of historical information from multiple primary and secondary sources.
2. Demonstrate a familiarity with the main figures, events and concepts in the histories of multiple societies.
3. Assess the relative significance of several factors (e.g. race, class, gender, technological change) in shaping the history of multiple societies.

REQUIRED UNITED STATES HISTORY COURSES Units
HIST 11 History of the United States to 1877 ......................3
HIST 12 History of the United States since 1877...............3

LIST A - Select one of the following: Units
HIST 1/1H Western Civilization to 1648, or
Honors Western Civilization to 1648 ......................3
HIST 20 World History I, to 1600 .................................3

LIST B - Select one of the following: Units
HIST 2/2H Western Civilization since 1648, or
Honors Western Civilization since 1648 ............3
HIST 23 World History II, since 1500 .........................3

LIST C - Select one of the following: Units
HIST 17 History of the Muslim World to 1405 ..............3
HIST 20 World History I, to 1600 .................................3
HIST 20/WSTS 22 History of American Women .............3
HIST 23 World History II, since 1500 .........................3
HIST 29 History of Mexico, Colonial to Contemporary
Period .................................................................3
HIST 34 History of the American Civil Rights
Movement ............................................................3

History 20 or 23 may be used for list C only if not used in lists A or B.

LIST D - Select one of the following: Units
HIST 3 History of Ancient Rome ...............................3
HIST 15 History of the British Isles ..............................3
HIST 18 History of Ancient Greece .........................3
HIST 21 United States Civil War .................................3
HIST 25 History of Religion in the United States ........3
HIST 30 California History .......................................3

JOURNALISM FOR TRANSFER – MAJOR #5355

The Associate in Arts in Journalism for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Arts in Journalism for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate an understanding of journalistic responsibility.
2. Describe how the major mass media operate and analyze its impact on American society and its diverse communities.
3. Demonstrate the uses of photography, graphics and multimedia tools in media productions.
4. Report, write and edit news stories for multimedia and meet journalistic deadlines.
KINESIOLOGY FOR TRANSFER

An Associate in Arts in Kinesiology for Transfer is designed for students who plan to complete a bachelor’s degree in Kinesiology at a CSU or UC campus. An Associate in Arts in Kinesiology prepares students to pursue studies in fields such as kinesiology/physical education credential programs, exercise science, athletic training/sports medicine, and sports administration. To earn the Associate in Arts in Kinesiology for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 22-23 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Recognize and evaluate the importance of a healthy and physically active lifestyle.
2. Identify the major systems of the human body as they relate to movement and activity by explaining and applying the principles of anatomy and physiology.

REQUIRED CORE COURSES: 15 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy, and</td>
<td></td>
</tr>
<tr>
<td>BIOL 22</td>
<td>Human Physiology, or</td>
<td></td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>Human Anatomy &amp; Physiology I, and</td>
<td></td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>Human Anatomy &amp; Physiology II</td>
<td></td>
</tr>
<tr>
<td>HLTH 2</td>
<td>First Aid and Safety</td>
<td></td>
</tr>
<tr>
<td>PE 62</td>
<td>Introduction to Kinesiology</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

REQUIRED CORE COURSES: 3 units

Select a minimum of 3 different courses from the following for a total of 3 or more units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 3</td>
<td>Archery</td>
<td>1</td>
</tr>
<tr>
<td>PE 4</td>
<td>Badminton</td>
<td>1</td>
</tr>
<tr>
<td>PE 5</td>
<td>Basketball</td>
<td>1</td>
</tr>
<tr>
<td>PE 7</td>
<td>Golf</td>
<td>1</td>
</tr>
<tr>
<td>PE 12</td>
<td>Swimming</td>
<td>1</td>
</tr>
<tr>
<td>PE 13</td>
<td>Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 14</td>
<td>Volleyball</td>
<td>1</td>
</tr>
<tr>
<td>PE 15A</td>
<td>Weight Training (Women)</td>
<td>1</td>
</tr>
<tr>
<td>PE 15B</td>
<td>Weight Training (Men)</td>
<td>1</td>
</tr>
<tr>
<td>PE 15C</td>
<td>Weight Training (Coed)</td>
<td>1</td>
</tr>
<tr>
<td>PE 17</td>
<td>Hatha Yoga</td>
<td>1</td>
</tr>
</tbody>
</table>

ELECTIVES: 4 units

Select a minimum of 1 course from the following for a total of 4 or more units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2A</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
</tbody>
</table>
MATH 5A Mathematical Analysis I ....................................... 5
MATH 5B Mathematical Analysis II ...................................... 4
MATH 6 Mathematical Analysis III .................................... 4
Total 13

GROUP A: Select a minimum of seven units from Groups A & B with at least three units from Group A. Units
MATH 7 Introduction to Differential Equations .................. 4
MATH 26 Elementary Linear Algebra............................... 3

GROUP B: Select a minimum of four units from Group B if less than seven units in Group A were selected. Units
CSCI 40 Programming Concepts & Methodology I.............. 4
MATH 11 Elementary Statistics, or
MATH 11H Honors Elementary Statistics, or
MATH 42 Statistics for the Behavioral Sciences............. 4
PHYS 4A Physics for Scientists and Engineers............... 4

MUS 1A Music Theory I ................................................... 3
MUS 1B Music Theory II ................................................. 3
MUS 2A Music Theory III .................................................. 3
MUS 2B Music Theory IV ............................................... 3
MUS 7A Ear Training I .................................................... 1
MUS 7B Ear Training: Level II ........................................ 1
MUS 7C Ear Training: Level III ....................................... 1
MUS 7D Ear Training: Level IV ........................................ 1

Two Units of Intermediate/Advanced class requirement to be selected from the following:
MUS 22 Intermediate/Advanced Piano........................ 1
MUS 26 Intermediate/Advanced Voice ......................... 1
MUS 29 Intermediate/Advanced Guitar ......................... 1
MUS 42A Intermediate/Advanced Brass (Brass Choir) .... 1
MUS 42B Intermediate/Advanced Woodwinds (Woodwind Choir) ........................................ 1
MUS 42C Intermediate/Advanced Strings (String Orchestra) .................................................. 1
MUS 42D Intermediate/Advanced Percussion (Percussion Ensemble) ........................................ 1
NUTRITION AND DIETETICS FOR TRANSFER – MAJOR #5683

The Associate in Science in Nutrition and Dietetics for Transfer is designed for students who plan to transfer to a CSU campus to complete a bachelor's degree in nutrition and dietetics. To earn the Associates in Science in Nutrition and Dietetics for Transfer degree, students must complete 60 units that are eligible for transfer to the California State University, including both of the following: the Intersegmental General Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements and a minimum of 18 semester units in a major or an 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. For more information on CSU admission and transfer requirements consult with a counselor. Upon completion of the Associates in Science in Nutrition and Dietetics for Transfer the students will be able to demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease. Students will demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients. Students will recognize and separate scientifically supported information from misinformation. Students will identify ways in which social factors influence food related choices, practices, and beliefs.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Demonstrate knowledge of the relationship of nutrients and lifestyle factors and the associated risk of chronic disease.
2. Demonstrate knowledge of physiological processes such as digestion, absorption, transport and metabolism of nutrients.
3. Recognize and separate scientifically supported information from misinformation.
4. Identify ways in which social factors influence food related choices, practices and beliefs.

PHILOSOPHY FOR TRANSFER – MAJOR #5341

An Associate in Arts in Philosophy for Transfer is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. An Associate in Arts in Philosophy for Transfer is a great way to develop critical and creative reasoning skills, enhance an ability to read complex materials with comprehension, and improve communication skills. These assets will be valuable as a transfer student to a four-year institution, whether you major in philosophy or some other field, and will enhance your preparation for a wide range of career opportunities. To earn the Associate in Arts in Philosophy for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate independent and critical thinking regarding important topics in philosophy.
2. Analyze and evaluate arguments, both philosophical and non-philosophical, in accordance with the standards taught in our philosophy courses.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 31</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry, and General Chemistry</td>
<td>10</td>
</tr>
<tr>
<td>CHEM 1B</td>
<td>and Qualitative Analysis</td>
<td></td>
</tr>
<tr>
<td>FN 40</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

List A: Select at least two courses from the list below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>Human Anatomy &amp; Physiology I, and</td>
<td></td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>9</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 28A</td>
<td>Organic Chemistry I, and Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 29B</td>
<td>Laboratory I</td>
<td></td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics, or</td>
<td></td>
</tr>
<tr>
<td>MATH/PSY 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
<td>3-4</td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td></td>
</tr>
</tbody>
</table>

List B: Select one course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 1</td>
<td>Principles of Food Preparation</td>
<td>3</td>
</tr>
</tbody>
</table>

2019-2020 Fresno City College Catalog
ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Given a set of initial conditions, apply problem solving techniques to develop a mathematical model which describes the physical characteristics of a given system. Identify known and unknown quantities, derive appropriate equations, and analyze the results.

2. Given a physical system, identify the core concepts and physical laws that apply. Describe the system in terms of the core concepts and physical laws. Select appropriate conceptual model(s) and justify their application.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Explain the method of inquiry used by political science.

2. Evaluate the success of political systems in building community, fostering economic growth and attaining the goals of liberty, security, and equality.

3. Identify and explain the causes and consequences of increasing global interdependence.

REQUIRED CORE Courses: Select one of the following: Units

POLSCI 2/2H  American Government, or Honors American Government......................... 3
### PSYCHOLOGY FOR TRANSFER – MAJOR #1000

Psychology is a useful major for students with a variety of interests and career goals due to its emphasis on critical thinking, the scientific method of inquiry, and the interactive role that biological, psychological, developmental, and sociocultural factors play in affecting human behavior and mental processes. The associate in arts in Psychology for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the associate in arts in Psychology for Transfer degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 19-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**

1. **Apply their knowledge of psychology's major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field's subdisciplines.**

2. **Recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.**

3. **When presented with information and claims about human behavior and mental processes, critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.**

### REQUIRED CORE COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH/PSY 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>POLSCI 1</td>
<td>Modern Politics</td>
</tr>
<tr>
<td>POLSCI 3</td>
<td>Introduction to Political Theory and Thought</td>
</tr>
<tr>
<td>POLSCI 5</td>
<td>Comparative Government</td>
</tr>
<tr>
<td>POLSCI 24</td>
<td>International Relations</td>
</tr>
<tr>
<td>LIST A: Select three of the following:</td>
<td></td>
</tr>
<tr>
<td>BA 20</td>
<td>Law and the Legal System</td>
</tr>
<tr>
<td>ECON 40</td>
<td>Introduction to Microeconomics, or</td>
</tr>
<tr>
<td>ECON 50</td>
<td>Introduction to Macroeconomics</td>
</tr>
<tr>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>General Psychology, or</td>
</tr>
<tr>
<td>PSY 36</td>
<td>Biological Psychology</td>
</tr>
<tr>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences</td>
</tr>
<tr>
<td>PSY 45</td>
<td>Introduction to Research Methods in Psychology</td>
</tr>
<tr>
<td>SELECT ONE OF THE FOLLOWING COURSES:</td>
<td></td>
</tr>
<tr>
<td>BIOL 5</td>
<td>Human Biology</td>
</tr>
<tr>
<td>PSY 5</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSY 16</td>
<td>Abnormal Psychology</td>
</tr>
<tr>
<td>PSY 25</td>
<td>Human Sexuality</td>
</tr>
<tr>
<td>PSY 33</td>
<td>Personal and Social Adjustment</td>
</tr>
</tbody>
</table>

**NOTE:** Psychology 5 can be taken in this section only if it was not taken as part of the previous sections.

### SOCIOLOGY FOR TRANSFER – MAJOR #7600

The associate in arts in Sociology for Transfer degree is designed to acquaint students with tools to understand the functioning of the society in which they live. The degree offers students a broad and multicultural perspective of the world around them and also provides them with a solid foundation for further study in sociology. Sociology can assist in occupations such as teaching, social work, drug and alcohol counseling, police work, probation aides, juvenile hall counseling, medical work, international business, and any other occupation that places you in contact with people of diverse backgrounds. The associate in arts in Sociology for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. To earn the associate in arts in Sociology for Transfer degree, students must complete the following requirements: Completion of 60 semester units that are eligible for transfer to the California State University, including all of the following: Students must earn a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements (CSU-GE). Completion of a minimum of 18 semester units in the associate in arts degree in Sociology for Transfer as identified by the Fresno City College catalog. Students must earn a “C” or better in all of the courses required for this degree.
ASSOCIATE IN ARTS DEGREE

**Student Learning Outcome:**

1. Understand the complexity of social life, including an understanding of the social forces that shape institutions in society, sources of societal problems, and remedies to address those problems.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 5</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences, or MATH 11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td>Introduction to Sociology, or Honors Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1B</td>
<td>Critical Thinking about Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 32</td>
<td>Introduction to Marriage and Family</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following 3-unit courses: Units

- AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society .................... 3
- ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology .................................... 3
- HS 20 Introduction to Social Welfare .......................................................... 3
- SOC 2 American Minority Groups ............................................................... 3
- SOC/WSTS 5 Sociology of Rape ........................................................................... 3
- SOC/WSTS 7 Domestic Violence: Abuse within the Family ..................................... 3
- SOC/HS 10 Introduction to Aging Studies ....................................................... 3
- SOC/CLS 14 Sociology of the Mexican American Community .................................. 3
- WSTS 10 Changing Roles of Women ...................................................................... 3

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**SPANISH FOR TRANSFER – MAJOR #5550**

The Associate in Arts in Spanish for Transfer is designed to prepare students for further study in Spanish at the university level. A degree in Spanish is a great way to prepare students for entry into a variety of career options requiring intermediate or better levels of fluency. The Associate in Arts in Spanish major also acquaints students with the cultures of Spanish speaking countries. The Associate in Spanish for Transfer is specifically designed for students who plan to complete a bachelor's degree in Spanish at a CSU campus. To earn the Associate in Spanish for Transfer, students must complete 60 required semester units of CSU-transferable coursework, CSU-GE Breath or IGETC requirements and 21-24 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**

1. Engage in conversation using the Spanish in the daily life situation.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literacy excerpts written in Spanish.
3. Write at the advanced level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U.S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1</td>
<td>Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 2</td>
<td>High-Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish, or SPAN 3NS</td>
<td>5</td>
</tr>
</tbody>
</table>
| SPAN 4      | Intermediate Spanish for Spanish Speakers ............. 5
| SPAN 4NS    | High-Intermediate Spanish for Spanish Speakers ....... 5

**GROUP A:** Select a minimum of four (4) additional units from the following list

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
</table>
| SPAN 5      | The Short Story: Mexico, Spain, and the U.S. ........... 4
| SPAN 6      | The Short Story: Latin American, or SPAN 7            | 4     |
| SPAN 7      | Advanced Spanish: Composition and Grammar .............. 4
| SPAN 8      | Advanced Spanish Conversation ................................ 4
| SPAN 9      | Spanish Business and Culture .................................. 4
| SPAN 41     | Introduction to Poetry in Spanish.......................... 4
| SPAN 42     | Hispanic American Culture .................................... 4

**Total** 21-24

**Notes:**

1. Students entering the Spanish program at Spanish 2 or higher are required to complete the specified unit requirements of the degree. Students must consult with the Foreign Language Department Chair for approval of course substitutions.
2. Some of the above courses may have prerequisites. See the catalog or schedule of classes.
3. The Associate Degree requires completion of the major (21-24 units) with a “C” or better in each course plus the completion of the General Education (either CSU-GE Breadth or IGETC) for a total of 60 semester units with a 2.0 or better GPA.
4. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.
THEATRE ARTS FOR TRANSFER
– MAJOR # 5445

The associate in arts in Theatre Arts for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the associate in arts transfer degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students are required to complete: A) a minimum of 18 semester units in the major with a grade of C or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework. B) 60 semester CSU-transferable units using the California State University-General Education-Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. C) No more than 60 semester units are required.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Identify the literature and styles of theatre.
2. Demonstrate the acting process.
3. Demonstrate the production process.

CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 30</td>
<td>Theatre Appreciation, or</td>
</tr>
<tr>
<td>TA 31</td>
<td>Theatre History and Dramatic Literature .......... 3</td>
</tr>
<tr>
<td>TA 40</td>
<td>Performance Practicum, or</td>
</tr>
<tr>
<td>TA 23</td>
<td>Technical Theatre Practicum .......................... 3</td>
</tr>
<tr>
<td>TA 41</td>
<td>Beginning Acting, or</td>
</tr>
<tr>
<td>TA 42</td>
<td>Beginning Acting for Theatre Majors.................. 3</td>
</tr>
</tbody>
</table>

Elective Courses: Select 9 Units from the following Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 25</td>
<td>Stagecraft .................................. 3</td>
</tr>
<tr>
<td>TA 27B</td>
<td>Introduction to Lighting Design.................. 3</td>
</tr>
<tr>
<td>TA 28</td>
<td>Introduction to Stage Makeup .................... 3</td>
</tr>
<tr>
<td>TA 36</td>
<td>Costume Design .................................. 3</td>
</tr>
<tr>
<td>TA 38</td>
<td>Script Analysis ................................ 3</td>
</tr>
<tr>
<td>TA 40</td>
<td>Performance Practicum ............................ 3</td>
</tr>
<tr>
<td>TA 43</td>
<td>Intermediate Acting ............................. 3</td>
</tr>
</tbody>
</table>

Note: TA 40 can be taken in this section only if they were not taken as part of the core.
ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS

ACCOUNTING

ACCOUNTING – MAJOR #2010

The AS Degree in Accounting qualifies the student for entry-level accounting positions in business, government, industry, and financial institutions. Students interested in pursuing a BS Degree in Accounting should consult the catalog of the institution to which they wish to transfer for the specific requirements of that program.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Operate and maintain an integrated accounting system in both a manual and a computerized environment.
2. Develop and analyze accounting information to meet the needs of both external and internal users.
3. Demonstrate proficiency in accounting theory, functions, and skills.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Units</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCTG 4A</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>*ACCTG 4B</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>ACCTG 19</td>
<td>Work Experience (Cooperative), Occupational</td>
</tr>
<tr>
<td>*ACCTG 51</td>
<td>Intermediate Accounting</td>
</tr>
<tr>
<td>*ACCTG 52</td>
<td>Cost Accounting</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>QuickBooks Fundamentals, or Sage 100 Fundamentals</td>
</tr>
<tr>
<td>BA 10/10H</td>
<td>Introduction to Business, or Honors Introduction to Business</td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
</tr>
<tr>
<td>CIT 23</td>
<td>Spreadsheet Fundamentals, or Beginning Excel</td>
</tr>
<tr>
<td>BT 24</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

Select 3 of the following courses: (ACCTG 70 and ACCTG 73 can only be used if not taken above)

<table>
<thead>
<tr>
<th>Units</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCTG 53</td>
<td>Tax Accounting</td>
</tr>
<tr>
<td>*ACCTG 54A</td>
<td>Principles of Auditing</td>
</tr>
<tr>
<td>*ACCTG 56</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>*ACCTG 57</td>
<td>Governmental Accounting</td>
</tr>
<tr>
<td>*ACCTG 61</td>
<td>Forensics Accounting</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>QuickBooks Fundamentals</td>
</tr>
<tr>
<td>ACCTG 73</td>
<td>Sage 100 Fundamentals</td>
</tr>
</tbody>
</table>

*The advanced accounting courses noted above may also be used to satisfy the unit eligibility requirement that must be met before a person can take the CPA Exam. Many students take these courses to satisfy that CPA exam requirement as well as to satisfy the AS degree requirements.

Note: Associate degree requirements are listed on page 35.

ACCOUNTING – MAJOR #2010

The Accounting Certificate of Achievement qualifies the student for entry-level accounting positions in business, government, industry, and financial institutions.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Operate and maintain an integrated accounting system in both a manual and a computerized environment.
2. Develop and analyze accounting information to meet the needs of both external and internal users.
3. Demonstrate proficiency in accounting theory, functions, and skills.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Units</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCTG 4A</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>*ACCTG 4B</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>ACCTG 19</td>
<td>Work Experience (Cooperative), Occupational</td>
</tr>
<tr>
<td>*ACCTG 51</td>
<td>Intermediate Accounting</td>
</tr>
<tr>
<td>*ACCTG 52</td>
<td>Cost Accounting</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>QuickBooks Fundamentals, or Sage 100 Fundamentals</td>
</tr>
<tr>
<td>BA 10/10H</td>
<td>Introduction to Business, or Honors Introduction to Business</td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
</tr>
<tr>
<td>CIT 23</td>
<td>Spreadsheet Fundamentals, or Beginning Excel</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>
Select 3 of the following courses: (ACCTG 70 and ACCTG 73 can only be used if not taken above) 

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 53</td>
<td>Tax Accounting</td>
</tr>
<tr>
<td>ACCTG 54A</td>
<td>Principles of Auditing</td>
</tr>
<tr>
<td>ACCTG 56</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>ACCTG 57</td>
<td>Governmental Accounting</td>
</tr>
<tr>
<td>ACCTG 61</td>
<td>Forensics Accounting</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>QuickBooks Fundamentals</td>
</tr>
<tr>
<td>ACCTG 73</td>
<td>Sage 100 Fundamentals</td>
</tr>
</tbody>
</table>

*The advanced accounting courses noted above may also be used to satisfy the unit eligibility requirement that must be met before a person can take the CPA Exam. Many students take these courses to satisfy that CPA exam requirement as well as to satisfy the Certificate of Achievement requirements.

COMPUTERIZED ACCOUNTING FOR THE WORKPLACE - FORMERLY COMPUTERIZED ACCOUNTING - MAJOR #2056

The Computerized Accounting for the Workplace Certificate of Achievement is designed for entry-level employment as an account clerk using various software packages and the latest in business technology to perform various accounting functions.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Develop accounting information to meet the needs of both external and internal users.
2. Record and enter transactions into an accounting system in both a manual and a computerized environment.
3. Demonstrate an understanding of accounting functions and skills required in the workplace.

REQUIRED COURSES

<table>
<thead>
<tr>
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<th>Units</th>
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<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>ACCTG 19</td>
<td>Work Experience (Cooperative), Occupational</td>
</tr>
<tr>
<td>ACCTG 56</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>QuickBooks Fundamentals</td>
</tr>
<tr>
<td>ACCTG 73</td>
<td>Sage 100 Fundamentals</td>
</tr>
<tr>
<td>CIT 23</td>
<td>Spreadsheet Fundamentals, or Beginning Excel</td>
</tr>
<tr>
<td>BT 24</td>
<td></td>
</tr>
</tbody>
</table>

Total 17-18

ADMINISTRATION OF JUSTICE

ADULT CORRECTIONAL OFFICER CORE – MAJOR #8941

Designed for the student needing to complete the Standards and Training for Corrections (STC) Adult Correctional Officer Core Course to become a County Correctional Officer in the State of California.

CERTIFICATE

Student Learning Outcomes:

1. Qualified to enter an employee training program for a County Correctional Detention Facility in the State of California.
2. Identify the organizational operation and process of confinement and care for adult or juvenile prisoners.
3. Apply the philosophy of the correctional system at a local level.

REQUIRED COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 280</td>
<td>Adult Correctional Officer Core</td>
</tr>
</tbody>
</table>

BASIC POLICE ACADEMY – MAJOR #8921

The Basic Police Academy Certificate of Achievement program offers curriculum to prepare students with the knowledge and skills necessary to complete a law enforcement field training program certified by the California Commission on Peace Officer Standards and Training (POST). Employment opportunities are found in both government and private enterprise where law enforcement principles are applied.

The basic academy is offered in three different formats; the intensive 40 hour per week format, the 24 hour per week night academy extended format, and the modular format. Hours per week may vary slightly according to schedule.

PROGRAM REQUIREMENTS

To qualify for the program, applicants must:

1. Be 18 years of age and have a high school diploma or G.E.D.
2. Complete and submit the Fresno City College and Police Academy applications.
3. Pass the POST written examination and physical agility test.
4. Applicants must attend an interview and orientation, and will be notified regarding their acceptance.

Accepted applicants must:

1. Possess a valid California Driver's License and provide a DMV printout of their driving record.
2. Provide a Department of Justice clearance for firearms possession.
3. Provide proof of a physical examination including an Electrocardiogram with a physician’s approval for applicant to participate in all aspects of academy training.
CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Demonstrate knowledge of California laws pertaining to arrest authority of a peace officer and a citizen covered under Penal Code sections 836 and 837.
2. Compare and contrast the constitutional issues involved in detentions, arrest and interrogations.
3. Demonstrate physical competency in psychomotor skills in handling police weaponry in a safe manner.
4. Demonstrate the ability to communicate effectively and professionally through written, oral and electronic media.
5. Identify the California laws that pertain to the enforcement and procedural aspects of law enforcement, recognizing the violations an officer is likely to encounter and describe the legal obligations in enforcing those laws.
6. Identify the process to confine and care for adult or juvenile prisoners in such a manner as to provide the necessary confinement and to protect the prisoner’s rights and welfare.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>AJ 270A</td>
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<td>AJ 270B</td>
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OR

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>AJ 272</td>
<td>10</td>
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<tr>
<td>AJ 273</td>
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<td>Total</td>
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</tbody>
</table>

JUVENILE CORRECTIONAL OFFICER CORE
– MAJOR #8943

Designed for the student needing to complete the Standards and Training for Corrections (STC) Juvenile Corrections Officer Core Course to become a Juvenile Corrections Officer in the State of California.

CERTIFICATE

Student Learning Outcomes:

1. Identify the responsibilities of a Juvenile Corrections Officer in the State of California.
2. Distinguish the responsibilities of the probation officer when a minor is taken into custody using the Welfare and Institutions Codes 625, 627, and 627.5.

REQUIRED COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 285</td>
<td>10</td>
</tr>
</tbody>
</table>

POST BASIC SUPERVISOR
– FORMERLY BASIC SUPERVISOR - MAJOR #8927

Designed for the student needing to complete the California Commission on Peace Officer Standards and Training (POST) required 80-hour course to become a supervisor for a California public safety agency.

CERTIFICATE

Student Learning Outcomes:

1. Satisfies all the required mandated training for California Peace Officers Standards and Training (POST) to become a supervisor.
2. Identify methodologies of supervision related to the law enforcement profession.

REQUIRED COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 276</td>
<td>4.5</td>
</tr>
</tbody>
</table>

PROBATION CORE COURSE – MAJOR #8942

Designed for the student needing to complete the Standards and Training for Corrections (STC) Probation Officer Core Course to become a County Probation Officer in the State of California.

CERTIFICATE

Student Learning Outcomes:

1. Identify the responsibilities of a County Probation Officer for the State of California.
2. Recognize the required state and federal reporting laws as they pertain to a Public Safety Dispatcher.

REQUIRED COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 278</td>
<td>7</td>
</tr>
</tbody>
</table>

PUBLIC SAFETY DISPATCHER – MAJOR #8970

Designed for the student needing to complete the Peace Officer Standards and Training (POST) Public Safety Dispatcher 120-hour course required under POST Regulation 1018(d)(1).

CERTIFICATE

Student Learning Outcomes:

1. Identify basic functions of Public Safety Dispatcher.
2. Recognize the required state and federal reporting laws as they pertain to a Public Safety Dispatcher.

REQUIRED COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 278</td>
<td>7</td>
</tr>
</tbody>
</table>
**REQUALIFICATION - BASIC COURSE**

– MAJOR #8925

Designed for eligible students under California Commission on Peace Officer Standards and Training (POST) PAM Regulation 1008(b) or Procedure D-11-6(d), needing to complete the POST Requalification Course necessary to maintain their Basic POST Certificate.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Satisfies all the POST required retraining to become a sworn peace officer in the State of California.
2. Qualified to enter a California Peace Officer’s Field Training Program.

**REQUIRED COURSE**

AJ 219  
Requalification - Basic Course ........................................... 6

---

**STC BASIC SUPERVISOR – MAJOR # 8926**

Designed for the student needing to complete the California Standards and Training for Corrections (STC) required 80-hour course to become a supervisor for a California public safety agency.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Satisfies the 80-hour requirement of Minimum Jail Standards Title 15, Section 181 to become a probation or corrections supervisor.
2. Identify methodologies of supervision related to the probation and corrections professions.

**REQUIRED COURSE**

AJ 276A  
STC Basic Supervisor Course ........................................... 4.5

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**AFRICAN-AMERICAN STUDIES**

– MAJOR #7640

The African-American Studies degree is a social science based program designed to focus on the history, heritage, and social culture of African-Americans and African people of the diaspora. African-American Studies provides the knowledge and skills, and interdisciplinary critical analysis necessary to help students understand, communicate, and appreciate the rich cultural diversity of American society through the study of the African-American community.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**
1. Evaluate and analyze the historical and cultural contributions made by African-Americans to the economic, social and political systems of the United States.
2. Evaluate and assess the historic roles of Africa and African people throughout the world.
3. Analyze and evaluate contemporary social, political, and economic issues of the African-American community.
4. Demonstrate academic success and positive community involvement.

**Total Units Required....................................................... 18**

**REQUISITE CORE COURSES: Select 12 units**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAM 1</td>
<td>Introduction to African American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AFAM 2</td>
<td>African American Cultural Adaptation</td>
<td>3</td>
</tr>
<tr>
<td>AFAM 3</td>
<td>African-American Art</td>
<td>3</td>
</tr>
<tr>
<td>AFAM 15</td>
<td>African American Music</td>
<td>3</td>
</tr>
</tbody>
</table>

**COURSE OPTIONS: Select at least 6 units**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAM 4</td>
<td>Classical and Pre Colonial Africa</td>
<td>3</td>
</tr>
<tr>
<td>AFAM 5</td>
<td>The African Diaspora of the Americas</td>
<td>3</td>
</tr>
<tr>
<td>AFAM 6</td>
<td>African Cultures and Languages</td>
<td>3</td>
</tr>
<tr>
<td>AFAM 8</td>
<td>African-American Creative Workshop</td>
<td>3</td>
</tr>
<tr>
<td>AFAM/HIST 34</td>
<td>History of the American Civil Rights Movement</td>
<td>3</td>
</tr>
<tr>
<td>AFAM/ WSTS 41</td>
<td>The African-American Women's Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
<td>3</td>
</tr>
</tbody>
</table>

**Notes:** An associate in arts degree will be awarded to any candidate who successfully completes 60 units. The 60 units must include associate degree requirements and at least 18 units of course work as listed above.

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**ALLIED HEALTH**

**PRE-ALLIED HEALTH REGISTERED NURSING OPTION**

– MAJOR #4525

The Pre-Allied Health degree offers an interdisciplinary approach of study for students seeking to enter the profession of health care in a variety of ways. The degree will allow students to pursue a rigorous course of study before selecting an area of concentration to match their career and study interests. With emphasis on basic science, cultural competency in health care, the degree offered will prepare students to excel in a wide range of health care fields. Students completing the degree will be prepared to enter programs for careers in Dental Hygiene, Health Information Technology, Medical Assisting, Radiologic Technology, Registered Nursing or Respiratory Care.

**ASSOCIATE IN SCIENCE DEGREE**

**Student Learning Outcomes:**
1. Articulate career options and the necessary educational pathway for health professions.
2. Express knowledge of current scientific and social issues affecting health care systems.
3. The student will be prepared to enter the Registered Nursing Program.
PUBLIC HEALTH FOR TRANSFER – MAJOR #8400

The Associate in Science in Public Health for Transfer is designed for students who plan to complete a bachelor's degree in Health Science at a CSU or UC campus. An Associate in Science in Public Health focuses on competencies that include knowledge of public health models, health risk assessments, health screenings, health promotion programming, surveillance of disease outbreaks and injury prevention strategies for a community. The public health field includes disciplines such as patient health navigator, health education outreach, epidemiology, biostatistics, health services, environmental health, behavioral health, and occupational health. The Public Health Associate in Science for Transfer provides preparedness in these job related career paths. To earn the Associate in Science in Public Health for transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 33 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Demonstrate the ability to comprehend and apply the multidimensional approach of public health sciences.
2. Identify proactive factors for disease prevention and risk factors for disease and disability.
3. Demonstrate and apply behavior-changing techniques to maximize health and wellness.
4. Demonstrate the concepts of research, program planning and evaluation strategies.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHLTH 100</td>
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<tr>
<td>BIOL 20</td>
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<td>BIOL 22</td>
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<td>BIOL 21A</td>
<td></td>
</tr>
<tr>
<td>BIOL 21B</td>
<td></td>
</tr>
<tr>
<td>CHEM 3A</td>
<td>9</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>4</td>
</tr>
<tr>
<td>MATH 103</td>
<td>5</td>
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<tr>
<td>SELECT</td>
<td>3</td>
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<tr>
<td>HIT 10</td>
<td>3</td>
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</tbody>
</table>

Total: 38 units

AMERICAN INDIAN STUDIES – MAJOR #7680

Fresno City College is located in an area that is rich in the history and contemporary cultures of American Indians. California has the highest American-Indian population in the United States, and has several Indigenous communities in our immediate area. American Indian Studies exists to serve Indian and non-Indian students who will be working in any service field, academic or social institution. The program leading to the associate in arts degree will also provide a foundation in American Indian Studies for students wishing to pursue a higher degree in the subject at a four-year university. In recent years, several graduate programs have begun in American-Indian Studies at universities in California and elsewhere.

Student must complete 12 units of required basic core courses. Select 9 units from the course options listed below for a total of 21 units for an associate in arts degree.
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Identify and describe cultural differences and similarities among the American Indian and Alaskan Native societies of North America.
2. Describe and analyze the material, political, spiritual, and environmental contributions made by American Indian societies to the world.
3. Identify the inappropriate uses of racial stereotypes about Indians and analyze how they have been used to advance special interests.
4. Explain historically the effects of colonization and imperialism on American Indian tribes.
5. Identify the major issues of the 20th and 21st century for American Indians, with an example on current events.
6. Evaluate the arts of diverse peoples through an expanded awareness and appreciation of North American arts.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 32</td>
<td>American Indian History</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>American Indian Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 35</td>
<td>American Indian Art</td>
<td>3</td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO/CLS 28</td>
<td>Ancient Mexico</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 14</td>
<td>Folklore</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2</td>
<td>Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Minority Groups</td>
<td>3</td>
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<tr>
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<td><strong>Total</strong></td>
<td><strong>12</strong></td>
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COURSE OPTIONS: Select a minimum of 9 units

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ASL 1</td>
<td>Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 2</td>
<td>High-Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 3</td>
<td>Intermediate American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 4</td>
<td>High-Intermediate American Sign Language</td>
<td>4</td>
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</tbody>
</table>

Notes:
1. An associate in arts degree will be awarded to any candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 23 units in course work as listed above.
2. Associate degree requirements are listed on page 35 of this catalog. General Education requirements for transfer certification are on page 47.

CERTIFICATE

Student Learning Outcomes:
1. Identify and describe cultural differences and similarities among the American Indian and Alaskan Native societies of North America.
2. Describe and analyze the material, political, spiritual, and environmental contributions made by American Indian societies to the world.
3. Identify the inappropriate uses of racial stereotypes about Indians and analyze how they have been used to advance special interests.
4. Identify the major issues of the 20th and 21st century for American Indians, with an example on current events.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 32</td>
<td>American Indian History</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>American Indian Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 35</td>
<td>American Indian Art</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

AMERICAN SIGN LANGUAGE STUDIES – MAJOR #5505

This degree is designed to prepare students for transfer as a junior to a baccalaureate degree program in American Sign Language (ASL), Deaf Studies or Interpreting.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate ability to carry on a Sign Language conversation consistent with the ability of a 4th semester second language learner with a Deaf individual or groups of Deaf people.
2. Categories and describe characteristics that impact a Deaf person’s life in the following areas: the world of work, education, family, language and social development.
3. Identify and compare beliefs, values, norms, traditions and attitudes reflected in Deaf culture, their subgroups and other cultures.
4. Organize a plan to utilize career development tools and resources for use in the Deaf community.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 1</td>
<td>Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 2</td>
<td>High-Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 3</td>
<td>Intermediate American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 4</td>
<td>High-Intermediate American Sign Language</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes:
1. An associate in arts degree will be awarded to any candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 23 units in course work as listed above. Associate degree requirements are listed on page 35 of this catalog. General Education requirements for transfer certification are on page 47.

Fresno City College is located in an area that is rich in the history and contemporary cultures of American Indians. California has the highest American-Indian population in the United States, and has several Indigenous communities in our immediate area. The Certificate in American Indian Studies exists to serve Indian and non-Indian students who will be working for local tribes communities, tribal organizations, in any service field, academic or social institution servicing American Indians. To earn the certificate the student must complete 12 units of required basic core courses.
ANTHROPOLOGY – MAJOR #7100

A program designed to acquaint students with human diversity, anthropology offers a broad approach to the study of people including the prehistoric, biological, and cultural perspectives. Because of its wide coverage, anthropology provides a versatile background, which can serve as a solid foundation not only for transfer students in anthropology but for many fields and vocations.

Students planning for a career in anthropology will need to earn at least a Bachelor's degree. Therefore students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU certification) early in their program. Anthropology students should also meet with anthropology faculty about course/program offerings as soon as possible once the major has been declared in order to complete the program in a timely manner.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Identify the primary goals of the discipline of anthropology.
2. Demonstrate understanding of the primary methods of the discipline of anthropology.
3. Demonstrate understanding of human cultural diversity and biological variation.

REQUIRED CORE COURSES (9 units minimum) Units
ANTHRO 1  Biological Anthropology................................. 3
ANTHRO 2/2H  Cultural Anthropology, or Honors Cultural Anthropology.................. 3
ANTHRO 4  Introduction to Archaeology......................... 3

ELECTIVES: 9 units minimum Units
AFRAM 1  Introduction to African American Studies........... 3
AMIND 20  Native Peoples of California............................ 3
AMIND 31  American Indian Culture................................3
AMST 10  American Pluralism: A Search for Common Ground in a Multicultural Society ............................... 3
ANTHRO 1L  Biological Anthropology Laboratory............... 1

*ANTHRO 3  Archaeology & World Prehistory.................... 3
ANTHRO 8  Language and Culture, or
LING 10  Introduction to Language............................. 3
ANTHRO 12  Visual Anthropology: Introduction to
ANTHRO 13  Anthropology of Magic, Witchcraft, and Religion ............................................ 3
ANTHRO 15  Laboratory Methods in Archaeology................. 4
ANTHRO 16A  Field Archaeology I................................. 2
ANTHRO 16B  Field Archaeology II.................................. 2
ANTHRO 24  Doing Archaeology: Hands-On!...................... 1.5
ANTHRO/CLS 28  Ancient Mexico ..................................... 3
ANTHRO 30  Topics in Anthropology.............................. 1-3
ASAMER 15  Introduction to Asian-Americans...................... 3
ASL 5  Deaf Culture..................................................... 3
CLS 11  Introduction to Chicano-Latino Studies...................... 3
JOURN 16  Race, Gender and the Media............................ 3
MATH 11  Elementary Statistics, or
MATH/PSY 42  Statistics for the Behavioral Sciences........... 4
WSTS 10  Changing Roles of Women................................. 3

*Anthro 3 may be required by University of California campuses for transfer in Anthropology.

ANTHROPOLOGY FOR TRANSFER – MAJOR #7150

Anthropology is a program designed to acquaint students with human diversity through a broad approach to the study of people including the prehistoric, biological, and cultural perspectives. Because of its wide coverage, anthropology provides a versatile background that serves as a solid foundation for careers in many fields and vocations. The Associate in Arts in Anthropology for Transfer degree is designed for students who plan to complete a bachelor's degree in Anthropology at a CSU campus. The Associate in Arts in Anthropology for Transfer degree requires (1) The completion of 60 semester 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 in the Anthropology major. (2) Obtainment of a minimum grade point average of 2.0 and the grade of C or better in all courses required for the major. Students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU) early in their program. Anthropology students should also meet with anthropology faculty about course/program offerings as soon as possible once the major has been declared in order to complete the program in a timely manner.
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Demonstrate an understanding of anthropological approaches to the study of humanity: cross-cultural comparison and cultural relativity, holism, and evolutionary theory, and the uses of each.
2. Describe the breadth of anthropology and be able to characterize anthropology’s distinctive methodological approaches with respect to the different subdisciplines.
3. Demonstrate understanding of human cultural diversity and biological variation through time.

REQUIRED CORE COURSES (3 courses or 9 units minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 1</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 4</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 3-4 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 1L</td>
<td>Biological Anthropology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ANTHRO 3</td>
<td>Archaeology and World Prehistory</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 8</td>
<td>Language and Culture, or</td>
<td></td>
</tr>
<tr>
<td>LING 10</td>
<td>Introduction to Language</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 13</td>
<td>Anthropology of Magic, Witchcraft, and Religion</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 3-8 units from following courses or any courses not used in the section above:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 1</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 9</td>
<td>Introduction to Earth Science</td>
<td>4</td>
</tr>
<tr>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences, or Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 3-4 units from the following courses or any course not used in the sections above:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMFAM 1</td>
<td>Introduction to African American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 12</td>
<td>Visual Anthropology: Introduction to Ethnographic Film</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 15</td>
<td>Laboratory Methods in Archaeology</td>
<td>4</td>
</tr>
<tr>
<td>ANTHRO 16A</td>
<td>Field Archaeology I</td>
<td>2</td>
</tr>
<tr>
<td>ANTHRO 16B</td>
<td>Field Archaeology II</td>
<td>2</td>
</tr>
<tr>
<td>ANTHRO 24</td>
<td>Doing Archaeology: Hands-On!</td>
<td>1.5</td>
</tr>
<tr>
<td>ANTHRO/CLS 28</td>
<td>Ancient Mexico</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 15</td>
<td>Introduction to Asian-Americans</td>
<td>3</td>
</tr>
<tr>
<td>ASL 5</td>
<td>Deaf Culture</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 16</td>
<td>Race, Gender and the Media</td>
<td>3</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

ANTHROLOGY – ARCHAEOLOGY

ARCHAEOLOGICAL TECHNICIAN – MAJOR #7120

The Archaeological Technician Certificate of Achievement is a program designed to provide students with education and training in the various aspects of modern archaeology in preparation for 1) entry level employment, and 2) continuing education in archaeology. An archaeological technician may work in the field doing survey or excavation or in a laboratory processing archaeological collections, doing data entry, archival research, or other tasks related to the management of archaeological data, all under the direction of a professional archaeologist.

Students planning for a career in archaeology will need to earn at least a Bachelor’s degree. Therefore archaeology students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/Csu certification) early in their program. Archaeology students should also meet with the archaeology faculty about course/program offerings as soon as possible in order to complete the program in a timely manner.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Students will demonstrate knowledge of terminology, methods, and theoretical framework of modern, scientific archaeology.
2. Students will have demonstrable skills in archaeological field methods.
3. Students will have demonstrable skills in archaeological laboratory methods.

REQUIRED CORE COURSES: (15 units minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 1</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 4</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 15</td>
<td>Laboratory Methods in Archaeology</td>
<td>4</td>
</tr>
<tr>
<td>ANTHRO 16A</td>
<td>Field Archaeology I</td>
<td>2</td>
</tr>
</tbody>
</table>

ELECTIVES (3 units minimum)

Students must complete a minimum of three units from the following list of electives. Other courses may be substituted based on the student's area of focus with faculty approval.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIND 20</td>
<td>Native Peoples of California</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 3</td>
<td>Archaeology and World Prehistory</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 16B</td>
<td>Field Archaeology II</td>
<td>2</td>
</tr>
<tr>
<td>ANTHRO 24</td>
<td>Doing Archaeology: Hands-On!</td>
<td>1.5</td>
</tr>
<tr>
<td>ANTHRO/CLS 28</td>
<td>Ancient Mexico</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 30</td>
<td>Topics in Anthropology</td>
<td>1-4</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>HIST 3</td>
<td>History of Ancient Rome</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18</td>
<td>History of Ancient Greece</td>
<td>3</td>
</tr>
<tr>
<td>HIST 30</td>
<td>California History</td>
<td>3</td>
</tr>
</tbody>
</table>

*This course is highly recommended for archaeology students.*
SUGGESTED SEQUENCE OF COURSES

Recommended ANTHRO 2 be taken prior to other anthropology courses. ANTHRO 4 should be taken prior to ANTHRO 16A. Other courses may be taken in any sequence.

ARCHITECTURE

ARCHITECTURE – MAJOR #6810

This curriculum is designed to prepare students for employment with architects, engineers, interior designers, building contractors, building material companies and government agencies. It is also designed as basic coursework for transferring into advanced degree programs in architecture and related fields. Courses may or may not be transferable based on school to which you are transferring, course content, and quality/quantity of the student portfolio. Students are encouraged to take courses in the order listed. Not all courses are offered each semester. Students wishing to transfer into an advanced degree program should contact that particular college or university for all specific transfer requirements including, but not limited to Math and English. Additional courses are necessary to fulfill the requirements for the Associate in Science degree. Please refer to the current catalog for more information.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Synthesize alternative solutions to a specific problem.
2. Design and complete an architectural education portfolio.
3. Draw a floor plan, foundation plan, roof framing plan, sections, and elevations.

First Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 10</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 11</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 12</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 14</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
</tr>
</tbody>
</table>

First Year - Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 20</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 21</td>
<td>3</td>
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<tr>
<td>ARCH 22</td>
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<tr>
<td>ARCH 24</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>12</td>
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</tbody>
</table>

Second Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 30</td>
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</tr>
<tr>
<td>ARCH 31</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 32</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 34</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>12</td>
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</tbody>
</table>

Second Year - Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 40</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 41A</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 42</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Students qualify for the certificate of achievement upon completion of the major requirements listed above. In addition, those completing the associate degree requirements on page 35 of the catalog, upon application, will be awarded the associate in science degree.

ARCHITECTURE – MAJOR #6810

This certificate of achievement is designed to prepare students for employment with architects, engineers, interior designers, building contractors, building material companies and government agencies. It is also designed as basic coursework for transferring into advanced degree programs in architecture and related fields. Courses may or may not be transferable based on school to which you are transferring, course content, and quality/quantity of the student portfolio. Students are encouraged to take courses in the order listed. Not all courses are offered each semester. Students wishing to transfer into an advanced degree program should contact that particular college or university for all specific transfer requirements including, but not limited to Math and English.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Synthesize alternative solutions to a specific problem.
2. Design and complete an architectural education portfolio.
3. Draw a floor plan, foundation plan, roof framing plan, sections, and elevations.

First Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 10</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 11</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 12</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 14</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
</tr>
</tbody>
</table>

First Year - Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 20</td>
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</tr>
<tr>
<td>ARCH 21</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 22</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 24</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
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</table>

Second Year - Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH 30</td>
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<tr>
<td>ARCH 31</td>
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<td>ARCH 32</td>
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</tr>
<tr>
<td>ARCH 34</td>
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<tr>
<td>Total</td>
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</tr>
</tbody>
</table>

2019-2020 Fresno City College Catalog
Second Year - Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ARCH 40</td>
<td>Architectural Design and Visualization IV</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 41A</td>
<td>Office Practices</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 42</td>
<td>Timber and Steel Structures</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Note: Students qualify for the certificate of achievement upon completion of the major requirements listed above.

**BASIC ARCHITECTURAL CONTRACT DOCUMENTS – MAJOR #6811**

This curriculum is designed to provide beginning knowledge and skills to individuals in the areas of architectural contract documents, accessibility and engineering principles.

**CERTIFICATE**

Student Learning Outcomes:
1. Demonstrate through drawing the technical elements of light, wood-frame construction.
2. Apply the correct accessibility regulations to a given project.
3. Calculate actual and allowable stresses.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 12</td>
<td>Architectural Practice I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 22</td>
<td>Architectural Practice II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 32</td>
<td>Statics and Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 42</td>
<td>Timber and Steel Structures</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**BASIC ARCHITECTURAL DESIGN – MAJOR #6812**

This curriculum is designed to provide beginning knowledge and skills to individuals in the areas of architectural programming, design and presentation.

Certificate

Student Learning Outcomes:
1. Use various drawing systems to represent three dimensional objects/space on two dimensional surfaces.
2. Identify and express the essence of a design problem within the context of an architectural program.
3. Design and complete an educational portfolio.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 10</td>
<td>Architectural Design and Visualization I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 20</td>
<td>Architectural Design and Visualization II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 30</td>
<td>Architectural Design and Visualization III</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 40</td>
<td>Architectural Design and Visualization IV</td>
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</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

**BASIC ARCHITECTURAL OFFICE PRACTICE – MAJOR #6813**

This curriculum is designed to provide beginning knowledge and skills to individuals in the area of architectural practice.

**CERTIFICATE**

Student Learning Outcomes:
1. Compare different careers in architecture and related fields.
2. Compare and contrast the compatibility of different materials, their applications, cost and availability.
3. Analyze buildings for specific, detailed compliance with building codes.
4. Compare, contrast, and write different types of construction specifications.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 11</td>
<td>Introduction to Architecture and Environmental Design</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 21</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 31</td>
<td>Building Codes</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 41A</td>
<td>Office Practices</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

**BASIC ARCHITECTURE SKILLS 1 – MAJOR #6814**

This curriculum is designed to provide beginning knowledge and skills to individuals in the areas of architectural design, practice and CAD.

**CERTIFICATE**

Student Learning Outcomes:
1. Use problem solving and visualization techniques to synthesize solutions to specific design and drawing problems.
2. Compare different careers in architecture and related fields.
3. Demonstrate through drawing the technical elements of light, woodframe construction.
4. Construct basic 3D objects and stretch, extrude, and modify those objects using a computer aided drafting or computer aided modeling program.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 10</td>
<td>Architectural Design and Visualization I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 11</td>
<td>Introduction to Architecture and Environmental Design</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 12</td>
<td>Architectural Practice I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 14</td>
<td>Digital Tools for Architects</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>
BASIC ARCHITECTURE SKILLS 2 – MAJOR #6815

Continuation of the Basic Architecture Skills 1 certificate. This curriculum is designed to further the knowledge and skills of individuals in the areas of architectural design, practice and CAD.

CERTIFICATE

Student Learning Outcomes:
1. Properly use color, its properties and relationships.
2. Compare and contrast the relationship of cost and availability of materials.
3. Complete minimal contract documents for a light, commercial building.
4. Draw exterior elevations and sections using a specified computer aided drafting or building information modeling program.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 20</td>
<td>Architectural Design and Visualization II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 21</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 22</td>
<td>Architectural Practice II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 24</td>
<td>Building Information Modeling</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

BASIC DIGITAL ARCHITECTURE – MAJOR #6816

This curriculum is designed to provide beginning knowledge and skills to individuals in the area of digital architecture tools including 3D computer modeling and presentation.

CERTIFICATE

Student Learning Outcomes:
1. Construct basic 3D objects and stretch, extrude, and modify those objects using a computer aided drafting or computer aided modeling program.
2. Apply materials, shade and shadow to a 3D model using a computer aided drafting or computer aided modeling program.
3. Draw a floor plan, exterior elevations and sections using a computer aided drafting or building information modeling program.
4. Create photorealistic and non-photorealistic images using a computer aided modeling or building information modeling program.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 14</td>
<td>Digital Tools for Architects</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 24</td>
<td>Building Information Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 34</td>
<td>Digital Rendering</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

ART

ART - FORMERLY TWO-DIMENSIONAL ART - MAJOR #5205

The art degree signifies the completion of a comprehensive course of study in the visual arts. It provides a platform from which to build a career in the visual arts and further advancement towards a baccalaureate degree. An Associate in Art is a great way to develop critical and creative problem solving skills, enhance an ability to analyze complex visual information, and improve communication skills.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Apply knowledge of art fundamentals in order to identify, formulate and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally and in writing.
4. Understand the impact of art making in a global societal context.

REQUIRED CORE COURSES (15 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3</td>
<td>Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 4</td>
<td>Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 5/H</td>
<td>Art History Ancient to Medieval, or Honors Art History Ancient to Medieval</td>
<td>3</td>
</tr>
<tr>
<td>ART 6/H</td>
<td>Art History Renaissance to Modern, or Honors Art History Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>ART 7</td>
<td>Beginning Drawing, or</td>
<td></td>
</tr>
<tr>
<td>ART 8</td>
<td>Beginning Figure Drawing and Anatomy</td>
<td>3</td>
</tr>
</tbody>
</table>

Select a Minimum of 12 Units: (May take ART 7 or 8 if not taken in the core)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART 2</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 7</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 8</td>
<td>Beginning Figure Drawing and Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>ART 10</td>
<td>Beginning Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 11</td>
<td>Beginning Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 12A</td>
<td>Craft Workshop: Living Traditions</td>
<td>3</td>
</tr>
<tr>
<td>ART 12B</td>
<td>Intermediate Craft Workshop: Living Traditions</td>
<td>3</td>
</tr>
<tr>
<td>ART 13</td>
<td>Beginning Watercolor Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 14</td>
<td>Beginning Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 15</td>
<td>Ceramic Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 16</td>
<td>Life Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 17</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 18</td>
<td>Intermediate Figure Drawing and Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>ART 19</td>
<td>Intermediate Painting: Oil/Acrylic</td>
<td>3</td>
</tr>
<tr>
<td>ART 20</td>
<td>Intermediate Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 21</td>
<td>Intermediate Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 22B</td>
<td>Craft Workshop: Concepts in Fibers</td>
<td>3</td>
</tr>
</tbody>
</table>
ART 23 Intermediate Watercolor Painting ..................... 3
ART 24A Intaglio Printmaking ..................................... 3
ART 24B Lithograph Printmaking .................................. 3
ART 24C Relief Printmaking ......................................... 3
ART 24D Screenprinting ............................................. 3
ART 25 Mural Painting .............................................. 3
ART 28 Advanced Figure Drawing and Anatomy .............. 3
ART 29 Advanced Painting: Oil/Acrylic ......................... 3
ART 31 Advanced Sculpture .......................................... 3
ART 32A Beginning Jewelry and Metalsmithing .................. 3
ART 32B Intermediate Jewelry and Metalsmithing .............. 3
ART 36A Intermediate Wheel Throwing ........................... 3
ART 38A Intermediate Hand-Building .............................. 3
ART 55 Introduction to Asian Art .................................. 3
ART 60 Art of the Ancient Americas ............................... 3

*ART 3, ART 4, and ART 7 should be taken before other courses in the major.

STUDIO ARTS FOR TRANSFER – MAJOR #5250

An Associate in Arts in Studio Arts for Transfer is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. An Associate in Arts in Studio Arts for Transfer is a great way to develop critical and creative problem solving skills, enhance an ability to analyze complex visual information, and improve communication skills. These assets will be valuable as a transfer student to a four-year institution, whether you major in art or some other field, and will enhance your preparation for a wide range of career opportunities. To earn the Associate in Arts in Studio Arts for Transfer, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 24 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS

Student Learning Outcomes:
1. Apply knowledge of art fundamentals in order to identify, formulate, and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally and in writing.
4. Understand the impact of art making in a global and societal context.

REQUIRED CORE (12 Units)  

*ART 3 Two-Dimensional Design .................................. 3
*ART 4 Three-Dimensional Design ................................ 3
ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern .......... 3
*ART 7 Beginning Drawing ......................................... 3

LIST A: Select One (3 units)  

ART 5/5H Art History Ancient to Medieval, or Honors Art History Ancient to Medieval .......... 3
ART 55 Introduction to Asian Art .................................. 3
ART 60 Art of the Ancient Americas ............................... 3

LIST B: Select three courses (9 units)

Select one course from three of the following areas (Drawing, Painting, Printmaking, Ceramics, Sculpture, or Applied Drawing)

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 8 Beginning Figure Drawing and Anatomy, or Intermediate Drawing, or Intermediate Figure Drawing and Anatomy ...... 3</td>
</tr>
<tr>
<td>ART 9 Beginning Painting: Oil/Acrylic, or Intermediate Painting: Oil/Acrylic, or Intermediate Printing, or Intermediate Figure Drawing and Anatomy .......... 3</td>
</tr>
<tr>
<td>ART 10 Beginning Ceramics, or Intermediate Ceramics .............................................. 3</td>
</tr>
<tr>
<td>ART 11 Intermediate Sculpture, or Ceramic Sculpture, or Intermediate Sculpture .............................................. 3</td>
</tr>
<tr>
<td>ART 12A Craft Workshop: Living Traditions, or Intermediate Craft Workshop: Living Traditions, or Intermediate Craft Workshop: Living Traditions, or Intermediate Sculpture .............................................. 3</td>
</tr>
<tr>
<td>ART 12B Intermediate Craft Workshop: Living Traditions, or Intermediate Craft Workshop: Living Traditions, or Intermediate Craft Workshop: Living Traditions, or Intermediate Sculpture .............................................. 3</td>
</tr>
<tr>
<td>ART 22B Craft Workshop: Concepts in Fibers, or Beginning Jewelry and Metalsmithing ............... 3</td>
</tr>
<tr>
<td>ART 32A Beginning Jewelry and Metalsmithing .............................................. 3</td>
</tr>
<tr>
<td>*ART 3, ART 4, and ART 7 should be taken before the other courses in the major.</td>
</tr>
</tbody>
</table>
STUDIO ART - FORMERLY THREE-DIMENSIONAL ART
- MAJOR #5210

Offers the student a fundamental understanding of art and studio practices by completing 18 art units. Students will build a comprehensive portfolio that reflects their media of choice.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Apply knowledge of art fundamentals in order to identify, formulate, and resolve basic art and design problems.
2. Understand and use a variety of media and processes to accomplish artistic goals.
3. Demonstrate an ability to critique and analyze artwork visually, orally, or in writing.

REQUIRED CORE

*ART 3  Two-Dimensional Design ..............................3
*ART 4  Three-Dimensional Design ..............................3
*ART 7  Beginning Drawing .......................................3

LIST A (9 units):
ART 8  Beginning Figure Drawing and Anatomy ...........3
ART 9  Beginning Painting: Oil/Acrylic .........................3
ART 10  Beginning Ceramics ....................................3
ART 11  Beginning Sculpture ....................................3
ART 12A  Craft Workshop: Living Traditions ...............3
ART 12B  Intermediate Craft Workshop: Living Traditions ....3
ART 13  Beginning Watercolor Painting .....................3
ART 14  Beginning Printmaking ................................3
ART 15  Ceramic Sculpture ....................................3
ART 16  Life Painting ............................................3
ART 17  Intermediate Drawing ................................3
ART 18  Intermediate Figure Drawing and Anatomy ..3
ART 20  Intermediate Ceramics ................................3
ART 21  Intermediate Sculpture ................................3
ART 22B  Craft Workshop: Concepts in Fibers ...............3
ART 23  Intermediate Watercolor Painting ...............3
ART 24A  Intaglio Printmaking ................................3
ART 24B  Lithograph Printmaking ...............................3
ART 24C  Relief Printmaking ....................................3
ART 24D  Screenprinting ..........................................3
ART 25  Mural Painting ............................................3
ART 27  Advanced Drawing ....................................3
ART 28  Advanced Figure Drawing and Anatomy ..........3
ART 29  Advanced Painting: Oil/Acrylic .......................3
ART 31  Advanced Sculpture ....................................3
ART 32A  Beginning Jewelry and Metalsmithing ........3
ART 32B  Intermediate Jewelry and Metalsmithing ......3
ART 36A  Intermediate Wheel Throwing .......................3
ART 38A  Intermediate Hand-Building .........................3

*ART 3, ART 4, and ART 7 should be taken before other courses in the major.

ASIAN AMERICAN STUDIES

ASIAN AMERICAN STUDIES - MAJOR #7695

From an historical perspective, Asians have played major roles in Fresno from the early Chinese settlers who built a Chinatown to the Japanese Americans who were confined to an assembly center at the Fresno fairground to the Hmong refugees who fled from the aftermath of the Vietnam War to create the largest Hmong American community in the state of California. The structure and purpose of the Asian American Studies associate degree is twofold: one is to enhance the skills of students to successfully transfer and complete a baccalaureate degree, second is to provide knowledge and understanding of the Asian American as an individual and as a member of the Asian American community.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Identify and describe major historical experiences of Asians and Asian Americans.
2. Examine the cultural practices and evaluate how culture has evolved for the Asian American community.
3. Explore the dilemma confronting Asian Americans of the various generations from recent immigrants to the assimilated and acculturated Asian American family.
4. Evaluate the issues that have confronted Asians in the past as well as those relevant in a contemporary setting.

REQUIRED CORE COURSES

ASMAER 1  Indo-Chinese Americans .........................3
ASAMER 8  Chinese Culture ....................................3
ASAMER 15  Introduction to Asian-Americans ..............3
ASAMER 25  Asian American Social Issues .................3
ASAMER 55  Introduction to Asian Art .......................3

COURSE OPTIONS (6 units) ........................................Units
AMST 10  American Pluralism: A Search for Common Ground in a Multicultural Society .................3
ASAMER 10  Hmong Culture ....................................3
ASAMER 20  Asian American Literature .....................3
ASAMER 30  Asian-American Women .........................3
CHIN 1  Beginning Chinese ....................................5
CHIN 2  High-Beginning Chinese ............................5
HMONG 1  Beginning Hmong ....................................5
HMONG 2  High-Beginning Hmong ............................5
JAPAN 1  Beginning Japanese ..................................5
JAPAN 2  High-Beginning Japanese .........................5

Total 21
AUTOMOTIVE COLLISION REPAIR TECHNOLOGY - FORMERLY BODY AND FENDER MECHANIC – MAJOR #8071

Training in this field is designed to prepare the student for employment as an advanced apprentice trainee in body repairing, reconstruction, and finishing.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Straighten and fill damaged sheet metal.
2. Mix and apply body fillers, putties and plastic repair systems.
3. Remove and reattach body panels and align.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACR 151</td>
<td>Basic ACR, or ACR 151A Basic ACR, and ACR 151B Basic ACR</td>
</tr>
<tr>
<td>ACR 153</td>
<td>Advanced ACR, or ACR 153A Advanced ACR, and ACR 153B Advanced ACR</td>
</tr>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
</tr>
<tr>
<td>AT 21</td>
<td>Occupational Safety and Health</td>
</tr>
<tr>
<td>AT 40</td>
<td>Preparing for Employment Opportunities</td>
</tr>
<tr>
<td>WELD 2A</td>
<td>Introduction to Welding Technology</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
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</table>

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACR 155</td>
<td>Spray Refinishing</td>
</tr>
<tr>
<td>AUTOT 54</td>
<td>Suspension, Steering, and Wheel Alignment</td>
</tr>
</tbody>
</table>

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY - FORMERLY BODY AND FENDER MECHANIC – MAJOR #8072

Designed for students who wish to attend the Automotive Collision Course and go straight into the work force.

CERTIFICATE

Student Learning Outcome:
1. Student will have the entry level skills needed for employment in an Automotive Collision Repair Facility.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACR 153</td>
<td>Advanced ACR, or ACR 153A Advanced ACR, and ACR 153B Advanced ACR</td>
</tr>
<tr>
<td>WELD 2A</td>
<td>Introduction to Welding Technology</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

AUTOMOTIVE TECHNOLOGY

ALTERNATIVE FUELED VEHICLE (AFV) - MAJOR #8078

Satisfactory completion of this curriculum prepares the student for employment as an Alternative Fueled Vehicle (AFV) service technician.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Students will create a diagnostic path for the Alternative Fueled Vehicle powertrain system to industry standards.
2. Students will recommend an appropriate repair procedure for a given vehicle Alternative Fueled Vehicle (AFV) powertrain system to industry standards.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 9</td>
<td>Automotive Essentials</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
</tr>
<tr>
<td>AUTOT/ATGM 52</td>
<td>Automotive Electrical Systems</td>
</tr>
<tr>
<td>AUTOT/ATGM 53</td>
<td>Engine Performance</td>
</tr>
<tr>
<td>AUTOT/ATGM 57</td>
<td>Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics</td>
</tr>
</tbody>
</table>
AUTOMOTIVE TECHNOLOGY - MAJOR #8051

Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the automotive service and repair industry. Students will perform actual service and repair procedures in the automotive laboratory. This curriculum has been certified by the National Automotive Technicians Education Foundation (NATEF).

ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will demonstrate the appropriate repair procedure for a given system to industry standards.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 9</td>
<td>Automotive Essentials</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>10</td>
</tr>
<tr>
<td>AUTOT 51</td>
<td>Principles of Engine Theory and Service</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 52</td>
<td>Automotive Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 53</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 54</td>
<td>Suspension, Steering, and Wheel Alignment</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 55</td>
<td>Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles</td>
<td>6</td>
</tr>
<tr>
<td>AUTOT 56</td>
<td>Automotive Braking Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 57</td>
<td>Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 161A</td>
<td>Level 1 – Engine and Emission Control Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 161B</td>
<td>Level 2 – Smog Check Procedures Training</td>
<td>1.5</td>
</tr>
<tr>
<td>WELD 1</td>
<td>Exploring Welding/Metals</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVES (4 units)</td>
<td>Individualized Skills Training (IST)</td>
<td>1</td>
</tr>
<tr>
<td>AUTOT 58</td>
<td>Chassis System I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>AUTOT 58A</td>
<td>Individualized Skills Training (IST)</td>
<td>1</td>
</tr>
<tr>
<td>AUTOT 58B</td>
<td>Individualized Skills Training (IST)</td>
<td>1</td>
</tr>
<tr>
<td>AUTOT 58C</td>
<td>Individualized Skills Training (IST)</td>
<td>1</td>
</tr>
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<td>23</td>
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</table>

RECOMMENDED SEQUENCE

First Year - First Semester

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 9</td>
<td>Automotive Essentials</td>
<td>3</td>
</tr>
<tr>
<td>WELD 1</td>
<td>Exploring Welding/Metals</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 52</td>
<td>Automotive Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 53</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 58</td>
<td>Individualized Skills Training (IST)</td>
<td>1</td>
</tr>
<tr>
<td>AUTOT 58A</td>
<td>Chassis System I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>AUTOT 58B</td>
<td>Individualized Skills Training (IST)</td>
<td>1</td>
</tr>
<tr>
<td>AUTOT 58C</td>
<td>Individualized Skills Training (IST)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>57.5</td>
</tr>
</tbody>
</table>

CHASSIS TECHNICIAN – MAJOR #8053

Satisfactory completion of this curriculum prepares the student for employment as an automotive chassis service technician.

CERTIFICATE

Student Learning Outcomes:
1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.
Completion of the following courses and 3 units of work experience:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 282A</td>
<td>Suspension and Wheel Alignment</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 282B</td>
<td>Automotive Braking Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 283B</td>
<td>Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 284</td>
<td>Automotive Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**CHASSIS TECHNICIAN I – MAJOR #8056A**

Satisfactory completion of this curriculum prepares the student for employment as an automotive chassis service technician level I.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Create a diagnostic path appropriate for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT/ATGM 54</td>
<td>Suspension, Steering, and Wheel Alignment</td>
<td>4</td>
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<tr>
<td>AUTOT/ATGM 56</td>
<td>Automotive Braking Systems</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

**CHASSIS TECHNICIAN II – MAJOR #8056B**

Satisfactory completion of this curriculum prepares the student for employment as an automotive chassis service technician level II.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Create a diagnostic path appropriate for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT/ATGM 52</td>
<td>Automotive Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT/ATGM 57</td>
<td>Automotive Heating, Ventilation, Air</td>
<td>4</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

**EMISSION TECHNICIAN – MAJOR #8054**

Satisfactory completion of this curriculum prepares the student for employment as an emission service technician.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 161A</td>
<td>Level 1 – Engine and Emission Control Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 161B</td>
<td>Level 2 – Smog Check Procedures Training</td>
<td>1.5</td>
</tr>
<tr>
<td>AUTOT 261</td>
<td>BAR Specified Diagnosis and Repair Training</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 283A</td>
<td>Engine Performance and Diagnosis</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 283B</td>
<td>Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td>13.5</td>
</tr>
</tbody>
</table>

**EMISSION TECHNICIAN I – MAJOR #8057A**

Satisfactory completion of this curriculum prepares the student for employment as an emission service technician level I.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Create a diagnostic path appropriate for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT/ATGM 52</td>
<td>Automotive Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT/ATGM 53</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 261</td>
<td>BAR Specified Diagnosis and Repair Training</td>
<td>3</td>
</tr>
<tr>
<td>total</td>
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</tr>
</tbody>
</table>

**EMISSION TECHNICIAN II – MAJOR #8057B**

Satisfactory completion of this curriculum prepares the student for employment as an emission service technician level II.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Students will create a diagnostic path appropriate for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT 161A</td>
<td>Level 1 – Engine and Emission Control Fundamentals</td>
<td>3</td>
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<tr>
<td>AUTOT 161B</td>
<td>Level 2 – Smog Check Procedures Training</td>
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<tr>
<td>total</td>
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</tbody>
</table>
### HYBRID ELECTRIC VEHICLE (HEV) – MAJOR #8079

Satisfactory completion of this curriculum prepares the student for employment as a hybrid service technician.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Students will create a diagnostic path for the hybrid electric vehicle (HEV) to industry standards.
2. Students will recommend an appropriate repair procedure for a given vehicle's hybrid electric vehicle system to industry standards.

**REQUIRED COURSES**  

<table>
<thead>
<tr>
<th>AUTOT 9</th>
<th>Automotive Essentials</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT/ATGM 52</td>
<td>Automotive Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT/ATGM 53</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT/ATGM 57</td>
<td>Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 170A</td>
<td>Introduction to Hybrid Electric Vehicles (HEVs)</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT 170B</td>
<td>Service and Maintenance to Hybrid Electric Vehicles (HEVs)</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT 170C</td>
<td>Diagnosis and Repair to Hybrid Electric Vehicles (HEVs)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>

### POWERTRAIN TECHNICIAN – MAJOR #8055

Satisfactory completion of this curriculum prepares the student for employment as an automotive powertrain service technician.

**CERTIFICATE**

**Student Learning Outcomes:**

1. Students will create a diagnostic path for a given system to industry standards.
2. Students will recommend an appropriate repair strategy for a given system to industry standards.

**REQUIRED COURSES**  

| AUTOT 19 | Work Experience (Cooperative), Occupational | 2 |
| AUTOT/ATGM 51 | Principles of Engine Theory and Service | 4 |
| AUTOT/ATGM 53 | Engine Performance | 4 |
| **Total** | | 10 |

### POWERTRAIN TECHNICIAN II – MAJOR #8058B

Satisfactory completion of this curriculum prepares the student for employment as an automotive powertrain service technician level II.

**CERTIFICATE**

**Student Learning Outcomes:**

1. Create a diagnostic path for a given system to industry standards.
2. Recommend an appropriate repair strategy for a given system to industry standards.

**REQUIRED COURSES**  

| AUTOT 19 | Work Experience (Cooperative), Occupational | 2 |
| AUTOT/ATGM 52 | Automotive Electrical Systems | 4 |
| AUTOT/ATGM 55 | Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles | 4 |
| **Total** | | 12 |

### GENERAL MOTORS ASEP PROGRAM – MAJOR #805G

The General Motors Automotive Service Educational Program (GM ASEP) is a two-year associate degree program. GM ASEP incorporates the most advanced automotive technical training with a strong academic foundation in math, English, electronics, analytical and technical skills. The student earns a solid education combined with invaluable work experience for hands-on learning.

The National Institute of Automotive Service Excellence (ASE) Education Foundation and General Motors Corporation certify this curriculum.

**ASSOCIATE IN SCIENCE DEGREE**

**Student Learning Outcomes:**

1. Create a diagnostic path appropriate for a given system to industry standards.
2. Demonstrate the appropriate repair procedure for a given system to industry standards.

**REQUIRED COURSES**  

| AT 10 | Technical Computer Applications | 3 |
| ATGM 51 | Principles of Engine Theory and Service | 4 |
| ATGM 52 | Automotive Electrical Systems | 4 |
| ATGM 53 | Engine Performance | 4 |
| ATGM 54 | Suspension, Steering, and Wheel Alignment | 4 |
| ATGM 55 | Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles | 4 |
| ATGM 56 | Automotive Braking Systems | 4 |
### RECOMMENDED SEQUENCE

**First Year - Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>ATGM 54</td>
<td>Suspension, Steering, and Wheel Alignment</td>
<td>4</td>
</tr>
<tr>
<td>ATGM 56</td>
<td>Automotive Braking Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 9</td>
<td>Automotive Essentials</td>
<td>3</td>
</tr>
</tbody>
</table>

**First Year - Spring Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATGM 52</td>
<td>Automotive Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
</tbody>
</table>

**First Year - Summer Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATGM 51</td>
<td>Principles of Engine Theory and Service</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Year - Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATGM 53</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Year - Spring Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATGM 55</td>
<td>Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles</td>
<td>6</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 161A</td>
<td>Level 1 – Engine and Emission Control Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 161B</td>
<td>Level 2 – Smog Check Procedures Training</td>
<td>1.5</td>
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</table>

**Second Year - Summer Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATGM 57</td>
<td>Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics</td>
<td>4</td>
</tr>
</tbody>
</table>

### BIOLOGY – FORMERLY LIFE SCIENCE DEGREE

**MAJOR #6082**

This program is designed to provide students with foundational knowledge in biological principles and concepts. This two-year associate degree program is intended for transfer students majoring in the biological sciences.

The Biological and Life Sciences Program at Fresno City College provides entry level instruction in the following: fulfillment of prerequisites for entry into allied health fields, fulfillment of prerequisites for students transferring into biological sciences and fulfillment of general education requirements for transfer to four-year institutions.

Specific biology courses to meet degree requirements (14 units total).

### ASSOCIATE IN SCIENCE DEGREE

**Student Learning Outcomes:**

1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Describe the classes of organic molecules found in organisms and discuss their importance in biological systems.
3. Understand cellular processes and relate organelle structure to function.
4. Understand the structure and function to genetic material and apply the principles of genetics as they relate to organisms.
5. Appreciate biodiversity and understand the impact of human activity on ecological systems.
6. Explain the mechanisms of evolution and evaluate the scientific evidence to support it.

**Specific Biology courses to meet degree requirements:** (14 units total)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3</td>
<td>Introduction to Life Science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4</td>
<td>Principles of Zoology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 5</td>
<td>Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 6</td>
<td>Principles of Botany</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 7</td>
<td>Field Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 11A/11AH</td>
<td>Biology for Science Majors I, or Honors Biology for Science Majors I</td>
<td>5</td>
</tr>
</tbody>
</table>

**Specific Physical Science courses to meet degree requirements:** (6 units total)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 11B</td>
<td>Biology for Science Majors II</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 14</td>
<td>Conservation Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>Human Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 31</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 46</td>
<td>Elementary Horticulture</td>
<td>3.5</td>
</tr>
<tr>
<td>BIOL 55</td>
<td>Introduction to the Biology of Humans</td>
<td>3</td>
</tr>
</tbody>
</table>

**ASTRONOMY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTRO 10</td>
<td>Basic Astronomy</td>
<td>3</td>
</tr>
</tbody>
</table>
### CHEMISTRY
- **CHEM 1A**: General Chemistry and Qualitative Analysis — 5 units
- **CHEM 1B**: General Chemistry and Qualitative Analysis — 5 units
- **CHEM 3A**: Introductory General Chemistry — 4 units
- **CHEM 3B**: Introductory Organic & Biological Chemistry — 3 units
- **CHEM 8A**: Elementary Organic Chemistry — 3 units

### GEOGRAPHY
- **GEOG 1**: Physical Geography — 4 units
- **GEOG 7**: Physical Geography: Earth’s Surface — 4 units
- **GEOG 8**: Physical Geography: Weather and Climate — 4 units

### GEOLOGY
- **GEOL 1**: Physical Geology — 4 units
- **GEOL 2**: Historical Geology — 3 units
- **GEOL 4**: Geology of California — 3 units
- **GEOL 5**: Introduction to Oceanography — 3 units
- **GEOL 12**: Environmental Science — 3 units

### PHYSICS
- **PHYS 2A**: General Physics 1 — 4 units
- **PHYS 2B**: General Physics 2 — 4 units
- **PHYS 4A**: Physics for Scientists and Engineers — 4 units
- **PHYS 4B**: Physics for Scientists and Engineers — 4 units

### BIOLOGY FOR TRANSFER – MAJOR #6082

The goal of the Associate in Science in Biology for Transfer program at Fresno City College is to prepare students to seamlessly transfer into a CSU baccalaureate program in Biology. The Associate in Science in Biology for Transfer program at Fresno City College may also prepare students to transfer into a UC baccalaureate program in Biology. An Associate in Science in Biology for Transfer is comprised of the core set of introductory Biology and Mathematics courses that assist a student to develop critical thinking and analytical reasoning skills and establish conceptual frameworks for understanding biological phenomena. To earn the Associate in Science in Biology for Transfer, students must complete 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) Obtained 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. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

### ASSOCIATE IN SCIENCE DEGREE

**Student Learning Outcomes:**

1. Evaluate scientific literature and apply the scientific method to obtain and interpret data.
2. Understand the function of organic molecules in biological systems and relate organelle structure to cellular function.
3. Understand the structure and function of genetic material and apply the principles of genetics as they relate to organisms.
4. Understand the biodiversity of life on earth based on modern classification systems.
5. Understand the ecological relationships between organisms and the environment, and the impact of human activity on ecological systems.
6. Understand the scientific evidence for evolution and explain the mechanisms leading to evolutionary change over time.

### REQUIRED CORE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 11A/11AH</td>
<td>Biology for Science Majors I, or Honors Biology for Science Majors I</td>
</tr>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry, and</td>
</tr>
<tr>
<td>CHEM 1B</td>
<td>General Chemistry and Qualitative Analysis</td>
</tr>
<tr>
<td>MATH 5A</td>
<td>Mathematical Analysis I</td>
</tr>
</tbody>
</table>

### CHEMISTRY & MATH REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 11B</td>
<td>Biology for Science Majors II, or</td>
</tr>
<tr>
<td>BIOL 4</td>
<td>Principles of Zoology, and</td>
</tr>
<tr>
<td>BIOL 6</td>
<td>Principles of Botany</td>
</tr>
</tbody>
</table>

### FIELD BIOLOGIST – MAJOR #6083

The Field Biologist Certificate is a program designed to provide students with education and training in various aspects of field biology in preparation for 1) entry level employment in the environmental consulting field or government agencies 2) entry level field research assistant and 3) continuing education in biology. A certificated field biologist may work in the field doing plant and animals surveys, threatened and endangered species surveys, sensitive habitat delineation, biological construction monitoring or scientific data collection, all under the direction of qualified professional biologists. Students planning for a career in biology in most cases will need to earn at least a Bachelor’s Degree. Therefore, biology students are strongly encouraged to meet with a counselor about transfer requirements (IGETC/CSU certification) early in their program. Biology students should also meet with biology faculty about course/program offerings as soon as possible in order to complete the program in a timely manner.
CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Apply field sampling techniques that qualitatively and quantitatively measure and describe the role of a living organism in its environment.
2. Identify major habitat types and ecological phenomena in the field.
3. Describe the natural history of select plants, animals, and fungi of California.
4. Correctly use various plant and animal taxonomic keys.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 7</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 11A/11AH</td>
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</table>

SELECT ONE SEQUENCE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 11B</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 4</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 6</td>
<td>5</td>
</tr>
</tbody>
</table>

ELECTIVES:

Students that take the sequence BIOL 4, 6, and 7 must complete a minimum of 2 units. The alternative sequence of BIOL 11B and 7 must take 7 units. Electives may be taken in any sequence. GEOL 1 is highly recommended. (2-7 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 16A</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 1</td>
<td>4</td>
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<tr>
<td>GEOG 10</td>
<td>3</td>
</tr>
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<td>GEOL 1</td>
<td>4</td>
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<tr>
<td>GEOL 3</td>
<td>1-2</td>
</tr>
<tr>
<td>GEOL 4</td>
<td>3</td>
</tr>
</tbody>
</table>

First Year - First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BA 10/10H</strong> Introduction to Business, or Honors Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>*CIT 15 Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>*DS 21 Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>

First Year - Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BA 18 Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>*DS 23 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
</tr>
</tbody>
</table>

Second Year - First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCTG 4A Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>****BA 20 Law and the Legal System, or Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
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</tbody>
</table>

Second Year - Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCTG 4B Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>*ECON 40/40H Introduction of Microeconomics, or Honors Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
</tr>
</tbody>
</table>

BUSINESS ADMINISTRATION

BUSINESS ADMINISTRATION - MAJOR #2050

The following courses are required for the Associate in Arts degree in Business Administration.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate the ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the formulation and implementation of a corporate strategy.
3. Demonstrate the appropriate application of ethics, laws and soft skills required for the work environment including customer service, teambuilding, conflict management, time management, communication, and professional behavior.
4. Demonstrate the appropriate application of management theory relating to the functions of planning, organizing, leading and controlling for established businesses and entrepreneurial ventures.

First Year - First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BA 10/10H</strong> Introduction to Business, or Honors Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>*CIT 15 Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>*DS 21 Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>

First Year - Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BA 18 Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>*DS 23 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
</tr>
</tbody>
</table>

Second Year - First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCTG 4A Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>****BA 20 Law and the Legal System, or Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
</tr>
</tbody>
</table>

Second Year - Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCTG 4B Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>*ECON 40/40H Introduction of Microeconomics, or Honors Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
</tr>
</tbody>
</table>

*CSU, Fresno transfer courses required to enter the School of Business at CSUF
**Transfers as an elective
****Satisfies CSUF's GE, D.8, and FCC's GE, B.2

Note: Associate degree requirements are listed on page 35.

BUSINESS ADMINISTRATION FOR TRANSFER

- MAJOR #2049

Business is an exciting major for students with a variety of interests and career goals including options in entrepreneurship, marketing, business law, management, computer information systems, accounting, and finance. The Associate in Science in Business Administration for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Science in Business Administration degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major.
Local graduation requirements are not required for the transfer degree. Students must consult with a counselor when planning to complete the degree for additional information on university admission and transfer requirements. In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Apply knowledge of major business functions (accounting, quantitative, law, computer, and business concepts) and its methodologies and ethical applications in common business situations.
2. Apply professional behaviors in both business and personal situations.

REQUIRED CORE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 4B</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BA 18</td>
<td>Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>*ECON 40/40H</td>
<td>Introduction to Microeconomics, or Honors</td>
<td>3</td>
</tr>
<tr>
<td>*ECON 50/50H</td>
<td>Introduction to Macroeconomics, or Honors</td>
<td>3</td>
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</table>

Choose 2 of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 10/10H</td>
<td>Introduction to Business, or Honors Introduction</td>
<td>3</td>
</tr>
<tr>
<td>*DS 21</td>
<td>Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>*DS 23</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill General Education requirements.

21ST CENTURY WORK COMPETENCIES - MAJOR #2035

A step incentive certificate signifying proficiency in basic knowledge and skills related to human relations and general business concepts required for success in today's competitive economy.

CERTIFICATE

Student Learning Outcomes:
1. Demonstrate an understanding and application of human relations and professional workplace behaviors.
2. Identify, assess and critically evaluate basic business theory, functions, and skills required to manage effectively in a complex global environment.

COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 33</td>
<td>Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

ENTREPRENEURIAL VENTURES – MAJOR #2041

This certificate is designed to provide visual artists, musicians, artisans, engineers, technologists and other non-business majors and other skilled individuals with the necessary knowledge to launch a business and/or market their creations. These courses are focused on the start-up phases of a business.

CERTIFICATE

Student Learning Outcomes:
1. Complete a business plan.
2. Appropriate business theory relating to the functions of operations, management, marketing, accounting, technology and finance.
3. Demonstrate basic workplace written, verbal, non-verbal communication, negotiation, and soft skills required for the workplace.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 51</td>
<td>Business Planning and New Venture Launch</td>
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</tr>
<tr>
<td>BA 52</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
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</table>

ELECTIVE COURSES

Select 1 course from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BA 24</td>
<td>Negotiations</td>
<td>1.5</td>
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<tr>
<td>BA 27</td>
<td>Entrepreneurship Startup Lab</td>
<td>1-3</td>
</tr>
<tr>
<td>BA 30</td>
<td>Personal Finance</td>
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</table>

HUMAN RESOURCE MANAGEMENT ASSISTANT - MAJOR #2052

A step incentive certificate signifying proficiency in basic knowledge and skills required for an entry-level human resource assistant.

CERTIFICATE

Student Learning Outcomes:
1. Describe basic computer software and appropriate applications.
2. Demonstrate the appropriate application of State and Federal HR laws to business situations.
3. Demonstrate the appropriate application for each of the primary HR functions.
4. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
5. Define and describe how to take personal responsibility for professional and effective workplace relationships.

COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BA 31</td>
<td>Human Resource Management</td>
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<td>BA 33</td>
<td>Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BT 9</td>
<td>Computer Applications I, or</td>
<td></td>
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<tr>
<td>BT 25</td>
<td>Microsoft Office, or</td>
<td>3-4</td>
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<tr>
<td>CIT 20</td>
<td>Microsoft Office</td>
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<td></td>
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</tbody>
</table>
# BUSINESS ADMINISTRATION, MANAGEMENT

## ASSOCIATE IN SCIENCE DEGREE

### Student Learning Outcomes:

1. Appropriate application of management theory relating to the functions of planning, organizing, leading, and controlling as it relates to existing business and entrepreneurial ventures.
2. Ability to create and analyze the four basic financial statements and budgets, ability to perform time value of money calculations and recognize and evaluate opportunity and risk.
3. Assist in formulation and implementation of a corporate strategy.
4. Demonstrate basic workplace written, verbal, and non-verbal communication skills including the proper use of appropriate technologies, written reports, and formal presentations.
5. Demonstrate the appropriate application of ethics, laws and soft skills required for the work environment.

### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
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<td>3.5-4</td>
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<tr>
<td>BT 131</td>
<td></td>
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<tr>
<td>BA/ BT 5</td>
<td>3</td>
</tr>
<tr>
<td>BA 10/10H</td>
<td>3</td>
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<td>*BA 40</td>
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<td>*BA 43</td>
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<tr>
<td>CIT 15</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10</td>
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**Total 31.5-32**

### ELECTIVES: Select 6 Units

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<tr>
<td>BA 28</td>
<td>3</td>
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<td>BA 35</td>
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<td>BA 38</td>
<td>3</td>
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<tr>
<td>*BA 40</td>
<td>3</td>
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<tr>
<td>*BA 43</td>
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<tr>
<td>BA 52</td>
<td>3</td>
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<tr>
<td><strong>BT 131</strong></td>
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<tr>
<td>MKTG 11</td>
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<tr>
<td>MKTG 12</td>
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<td>MKTG 14</td>
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<td>MKTG 21</td>
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</tr>
<tr>
<td>RE 40</td>
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</tr>
<tr>
<td>RE 41</td>
<td>3</td>
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*Either BA 40 or BA 43 may be taken as a required course. The other class option may be taken as an elective course.*

**Either ACCTG 4A or BT 131 may be taken as a required course. The other class option may be taken as an elective course.**

### BUSINESS ADMINISTRATION, MANAGEMENT

## CERTIFICATE OF ACHIEVEMENT

### Student Learning Outcomes:

1. Appropriately apply the management functions of planning, organizing, leading and controlling.
2. Read and interpret basic financial statements.
3. Assist in the formulation and implementation of a corporate strategy.
4. Demonstrate proficiency in soft skills required for workplace success including teambuilding, conflict management, communication, and professional behavior.
5. Utilize basic workplace written, verbal, and nonverbal communication skills required to the workplace, including the proper use of appropriate technologies, written reports, and formal presentations.
### BUSINESS ADMINISTRATION, MANAGEMENT

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BA/BT 5 Workplace Communication</td>
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<tr>
<td>BA 10/10H Introduction to Business, or Honors Introduction to Business</td>
<td>3</td>
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<tr>
<td>BA 33 Human Relations in the Workplace</td>
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<tr>
<td>*BA 40 Supervision and Leadership, or BA 43 Principles of Management</td>
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Total 12

**ELECTIVES: Select 8 Units**

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<tbody>
<tr>
<td>ACCTG 4A Financial Accounting</td>
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<tr>
<td>BA 18 Business &amp; the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>BA 20 Law &amp; the Legal System</td>
<td>3</td>
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<tr>
<td>BA 28 E-Law &amp; Ethics</td>
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<tr>
<td>BA 30 Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>BA 31 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 34 Fundamentals of Investing</td>
<td>3</td>
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<tr>
<td>BA 35 Financial Management for Entrepreneurs and Small Business</td>
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<tr>
<td>BA 38 Operation of the Small Business</td>
<td>3</td>
</tr>
<tr>
<td>*BA 40 Supervision and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>*BA 43 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 51 Business Planning &amp; New Venture Launch</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 131 Applied Accounting</td>
<td>3.5</td>
</tr>
<tr>
<td>CIT 15 Computer Concepts</td>
<td>3</td>
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<tr>
<td>MKTG 10 Principles of Marketing</td>
<td>3</td>
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<tr>
<td>MKTG 11 Selling and Sales Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 12 Advertising and Promotion</td>
<td>3</td>
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<tr>
<td>MKTG 14 Retailing</td>
<td>3</td>
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<tr>
<td>MKTG 21 Digital Marketing</td>
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<tr>
<td>RE 40 Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RE 41 Real Estate Practice</td>
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</tr>
</tbody>
</table>

* Either BA 40 or BA 43 may be taken as a required course. The other class option may be taken as an elective course.

### BUSINESS FINANCE AND ACCOUNTING

**MAJOR #2031**

A step incentive for those seeking an entry level position in accounting or finance.

**CERTIFICATE**

**Student Learning Outcomes:**

1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the implementation of a corporate strategy as applied to finance and accounting issues including capital budgeting and working capital management.
3. Demonstrate skill proficiency in appropriate technologies, written reports, and formal presentations involving finance and accounting applications.
4. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to market participants and short-term and long-term financial management and investment objectives.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 4B Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BA 35 Financial Management for Entrepreneurs and Small Business</td>
<td>3</td>
</tr>
</tbody>
</table>

### BUSINESS FINANCE AND INVESTMENTS

**MAJOR #2271**

A step incentive for those seeking an entry level position in banking or finance.

**CERTIFICATE**

**Student Learning Outcomes:**

1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Assist in the implementation of a corporate strategy as applied to finance and investment issues including capital budgeting and working capital management.
3. Demonstrate skill proficiency in appropriate technologies, written reports, and formal presentations with respect to finance and investments.
4. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to market participants and short-term and long-term financial management and investment objectives.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 34 Fundamentals of Investing</td>
<td>3</td>
</tr>
<tr>
<td>BA 35 Financial Management for Entrepreneurs and Small Business</td>
<td>3</td>
</tr>
</tbody>
</table>
HUMAN RELATIONS AND COMMUNICATIONS
– MAJOR #2510

A step incentive certificate signifying proficiency in workplace human relations and communications.

CERTIFICATE

Student Learning Outcomes:
1. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
2. Describe how to make personal responsibility for professional and effective workplace relationships.
3. Describe and identify goal-setting theories and its influence on workplace performance.

REQUIRED COURSES  
Units
BA/BT 5  Workplace Communication .......................... 3
BA 33  Human Relations in the Workplace............... 3

HUMAN RESOURCE MANAGEMENT AND HUMAN RELATIONS – MAJOR #2520

A step incentive certificate signifying proficiency in entry-level human resource management skills.

CERTIFICATE

Student Learning Outcomes:
1. Demonstrate the appropriate application of State and Federal HR laws to business situations.
2. Demonstrate the appropriate application for each of the primary HR functions.
3. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication including the appropriate use of communication devices.
4. Demonstrate how to take personal responsibility for professional and effective workplace relationships.
5. Demonstrate an understanding of motivation and goal-setting theories and its influence on workplace performance.

REQUIRED COURSES  
Units
BA 31  Human Resources Management............... 3
BA 33  Human Relations in the Workplace............... 3

MANAGEMENT AND SUPERVISION
– MAJOR #2182

A step incentive certificate signifying proficiency in basic knowledge and skills required for a general management position. Awarded for the successful completion of courses listed with a minimum grade of "C" in each required course.

CERTIFICATE

Student Learning Outcomes:
1. Identify key functions, skills, and competitive goals of effective managers.
2. Demonstrate the appropriate application of State and Federal HR laws to business situations.
3. Define and describe common operational issues and appropriate supervisory responses to these issues.
4. Define and describe strategic and tactical issues and appropriate managerial responses to these issues.
5. Take personal responsibility for professional and effective workplace relationships.
6. Demonstrate effective communication skills through speaking, writing, and other common forms of business communication.

REQUIRED COURSES  
Units
BA 40  Supervision and Leadership............... 3
BA 43  Principles of Management............... 3

PERSONAL FINANCE AND INVESTMENTS
– MAJOR #2032

A step incentive demonstrating a basic understanding of personal finance and investments.

CERTIFICATE

Student Learning Outcomes:
1. Ability to create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
2. Ability to identify and discriminate between different financial markets, institutions and products and determine appropriateness to market.
3. Ability to describe the impact of exogenous factor inputs such as monetary and fiscal policy and changes in interest rates on financial management.
4. Ability to describe the basic principles of credit, insurance, large asset investments, saving and investing for the future, career development strategies, goal setting with respect to achievement of personal and lifelong financial objectives and business objectives.

REQUIRED COURSES  
Units
BA 30  Personal Finance............... 3
BA 34  Fundamentals of Investing............... 3
PROFESSIONAL AND CIVIC BEHAVIORS
– MAJOR #2036

Professional workplace behaviors/career preparation integrating life skills, mindsets, and work skills resulting in productive workplace relationships and civic engagement.

CERTIFICATE

Student Learning Outcomes:
1. Demonstrate an understanding and application of productive workplace relationships and the importance of civic engagement.
2. Complete career and civic plans which reflect key concepts related to productive workplace relationships and civic engagement.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
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<tr>
<td>BA 102</td>
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<td>BA 103</td>
<td>0.25</td>
</tr>
<tr>
<td>BA 104</td>
<td>0.25</td>
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</tbody>
</table>

REAL ESTATE COURSE QUALIFICATION
– MAJOR #2192

Successful completion of these three courses qualify an individual to sit for the Real Estate Salesperson examination and meets the requirements of the Department of Consumer Affairs – Bureau of Real Estate.

CERTIFICATE

Student Learning Outcomes:
1. Understand and apply the Realtor Code of Ethics and Regulations of the Department of Real Estate.
2. Explain how to locate appropriate financing for buyers of real property; and how to work with appraisers, in addition to understanding basic accounting, financial statements and transactions and interpreting financial statements.
3. Understand key components of commercial transactions, contracts, purchase agreements and laws that relate to those transactions.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE 40</td>
<td>3</td>
</tr>
<tr>
<td>RE 41</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 4A</td>
<td>3</td>
</tr>
<tr>
<td>BA 18</td>
<td>4</td>
</tr>
</tbody>
</table>

SMALL BUSINESS MANAGEMENT – MAJOR #2030

Certificate designed to prepare students to successfully launch and operate a small business.

CERTIFICATE

Student Learning Outcomes:
1. Appropriate application of management theory relating to the functions of planning, organizing, leading and controlling.
2. Create and analyze the four basic financial statements and budgets and recognize and evaluate opportunity and risk.
3. Assist in the formulation and implementation of a business strategy.
4. Demonstrate soft skills required for workplace success as applied to customer service, teambuilding, conflict management, time management, communication, and professional behavior.
5. Demonstrate basic workplace written, verbal, and non-verbal communication skills required for the workplace, including the proper use of: appropriate technologies, written reports, and formal presentations.
6. Manage new venture launch and continuing entrepreneurial operations.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 38 Operation of the Small Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 51 Business Planning and New Venture Launch</td>
<td>1.5</td>
</tr>
</tbody>
</table>

BUSINESS & TECHNOLOGY PROGRAM

OFFICE PROFESSIONAL I
– FORMERLY CLERICAL EMPHASIS – MAJOR #2062

Training is designed to provide skills for employment in a variety of professional office environments. Students may earn more than one certificate in addition to the associate in science degree and are required to earn grades of “C” or better in the Office Professional I courses.

ASSOCIATE IN SCIENCE

Student Learning Outcomes:
1. Use technology and office equipment effectively in an office environment.
2. Type a minimum of 40 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.
4. Maintain confidentiality and appropriate work habits including punctuality, teamwork, professional appearance, and positive attitude.
### OFFICE PROFESSIONAL I

**– FORMERLY CLERICAL EMPHASIS – MAJOR #2062**

Training is designed to provide skills for employment in a variety of professional environments. Students are required to earn grades of “C” or better in the Office Professional I courses.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Use technology and office equipment effectively in an office environment.
2. Type a minimum of 40 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.
4. Maintain confidentiality and appropriate work habits including punctuality, teamwork, professional appearance, and positive attitude.

<table>
<thead>
<tr>
<th>First Semester</th>
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<tbody>
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<td>BT 115</td>
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*Note: Requires additional general education units for AS degree.*

### OFFICE PROFESSIONAL – EXECUTIVE ASSISTANT EMPHASIS – FORMERLY OFFICE PROFESSIONAL II AND ADMINISTRATIVE ASSISTANT EMPHASIS – MAJOR #2215

Training is designed to provide advanced skills for employment in a variety of professional environments. Additional general education units are required for the AS degree. Students may earn more than one certificate in addition to the Associate in Science degree and are required to earn grades of “C” or better in all courses.

**ASSOCIATE IN SCIENCE**

**Student Learning Outcomes:**

1. Use technology applications and software effectively in a professional setting.
2. Proofread documents and correct errors in punctuation, grammar, capitalization, number expression, and spelling.
3. Type at least 40 gross words per minute with 97% accuracy.
4. Achieve a satisfactory evaluation in a work experience setting.

<table>
<thead>
<tr>
<th>REQUIRED CORE COURSES</th>
<th>Units</th>
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<tbody>
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**RECOMMENDED SEQUENCE**

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<tr>
<td>BT 122</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13.5</td>
</tr>
</tbody>
</table>
OFFICE PROFESSIONAL - EXECUTIVE ASSISTANT EMPHASIS – FORMERLY OFFICE PROFESSIONAL II AND ADMINISTRATIVE ASSISTANT EMPHASIS – MAJOR #2215

Training is designed to provide advanced skills for employment in a variety of professional office environments. Students may earn more than one certificate and are required to earn grades of “C” or better in all courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Use technology applications and software in a professional setting.
2. Proofread documents and correct errors in punctuation, grammar, capitalization, number expression, and spelling.
3. Type at least 40 gross words per minute with 97% accuracy.
4. Achieve a satisfactory evaluation in a work experience setting.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 1</td>
<td>Computer Document Processing I................. 4</td>
</tr>
<tr>
<td>BT 9</td>
<td>Computer Applications I.......................... 4</td>
</tr>
<tr>
<td>BT 19</td>
<td>Work Experience (Cooperative), Occupational..... 2</td>
</tr>
<tr>
<td>BT 23</td>
<td>Job Search and Workplace Skills................... 3</td>
</tr>
<tr>
<td>BT 112</td>
<td>Business English.................................... 3</td>
</tr>
<tr>
<td>BT 115</td>
<td>Refresher Math.................................... 3</td>
</tr>
</tbody>
</table>

EMPHASIS AREA COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BT 2</td>
<td>Computer Document Processing II.................. 3</td>
</tr>
<tr>
<td>BT 6</td>
<td>Records Management.................................. 3</td>
</tr>
<tr>
<td>BT 10</td>
<td>Computer Applications II.......................... 4</td>
</tr>
<tr>
<td>BT 33</td>
<td>Social Media and Emerging Technologies in the Workplace ............................................ 3</td>
</tr>
<tr>
<td>BT 122</td>
<td>Typing Skillbuilding................................ 0.5</td>
</tr>
<tr>
<td></td>
<td>Total 32.5</td>
</tr>
</tbody>
</table>

OFFICE PROFESSIONAL - LEGAL OFFICE EMPHASIS – FORMERLY LEGAL ADMINISTRATIVE ASSISTANT EMPHASIS AND LEGAL OFFICE PROFESSIONAL – MAJOR #2104

Training is designed to prepare students for employment in a legal office environment. Students may earn more than one certificate and are required to earn grades of “C” or better in all courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
3. Achieve a satisfactory evaluation in a work experience setting.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 1</td>
<td>Computer Document Processing I.................. 4</td>
</tr>
<tr>
<td>BT 9</td>
<td>Computer Applications I........................... 4</td>
</tr>
<tr>
<td>BT 19</td>
<td>Work Experience (Cooperative), Occupational.... 2</td>
</tr>
<tr>
<td>BT 23</td>
<td>Job Search and Workplace Skills.................. 3</td>
</tr>
<tr>
<td>BT 112</td>
<td>Business English................................... 3</td>
</tr>
<tr>
<td>BT 115</td>
<td>Refresher Math..................................... 3</td>
</tr>
</tbody>
</table>

REQUIRED EMPHASIS COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BT 140/PLEGAL 156</td>
<td>Legal Document Processing.................. 3</td>
</tr>
<tr>
<td>PLEGAL 7</td>
<td>Law Offices Practices............................ 3</td>
</tr>
<tr>
<td>PLEGAL 14</td>
<td>Law Office Computing............................. 3</td>
</tr>
<tr>
<td></td>
<td>Total 28</td>
</tr>
</tbody>
</table>

OFFICE PROFESSIONAL – MEDICAL OFFICE EMPHASIS - FORMERLY MEDICAL OFFICE PROFESSIONAL AND MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR #2383

Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate in addition to the Associate in Science degree and are required to earn grades of “C” or better in the Office Professional I and emphasis courses.

ASSOCIATE IN SCIENCE

Student Learning Outcomes:
1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Describe the basic organizational structure, operational principles and administrative processes associated with the law office environment.
3. Achieve a satisfactory evaluation in a work experience setting.
ASSOCIATE IN SCIENCE

Student Learning Outcomes:
1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Perform medical administrative duties.
3. Achieve a satisfactory evaluation in a work experience setting.

REQUIRED CORE COURSES Units
BT 1  Computer Document Processing I .......................... 4
BT 9  Computer Applications I ..................................... 4
BT 19 Work Experience (Cooperative), Occupational .......... 2
BT 23 Job Search and Workplace Skills .......................... 3
BT 112 Business English ............................................ 3
BT 115 Refresher Math ................................................. 3

REQUIRED EMPHASIS COURSES Units
BT 143 Medical Office Vocabulary ............................... 1
BT 144 Medical Administrative Assistant ..................... 2.5
BT 147 Medical Management Software ........................ 2
BT 148 Medical Insurance and Billing Concepts ............. 2.5
Total 27

OFFICE PROFESSIONAL – MEDICAL OFFICE EMPHASIS - FORMERLY MEDICAL OFFICE PROFESSIONAL AND MEDICAL ADMINISTRATIVE ASSISTANT EMPHASIS - MAJOR #2383

Training is designed to prepare students for employment in a medical office environment. Students may earn more than one certificate and are required to earn grades of “C” or better all courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Perform medical administrative duties.
3. Achieve a satisfactory evaluation in a work experience setting.

REQUIRED CORE COURSES Units
BT 1  Computer Document Processing I .......................... 4
BT 9  Computer Applications I ..................................... 4
BT 19 Work Experience (Cooperative), Occupational .......... 2
BT 23 Job Search and Workplace Skills .......................... 3
BT 112 Business English ............................................ 3
BT 115 Refresher Math ................................................. 3

REQUIRED EMPHASIS COURSES Units
BT 143 Medical Office Vocabulary ............................... 1
BT 144 Medical Administrative Assistant ..................... 2.5
BT 147 Medical Management Software ........................ 2
BT 148 Medical Insurance and Billing Concepts ............. 2.5
Total 27

BUSINESS OFFICE ENGLISH - MAJOR #2372

This certificate is designed to improve English grammar, speaking, writing, and presentation skills needed in the office.

CERTIFICATE

Student Learning Outcomes:
1. Use correct English grammar to communicate effectively when speaking, writing, and presenting in business settings.
2. Identify problems and revise business communication to improve meaning, tone, and clarity.

REQUIRED COURSES Units
BT 5  Workplace Communication ................................. 3
BT 13 Applied Business Correspondence ....................... 2
BT 112 Business English ............................................ 3
Total 8

BUSINESS OFFICE MATH FUNDAMENTALS - MAJOR #2328

This certificate is designed to improve computational and critical thinking skills needed in the office.

CERTIFICATE

Student Learning Outcome:
1. Apply fundamental mathematics computation skills to solve business-related problems with or without a ten-key calculator.

REQUIRED COURSES Units
BT 104 Ten-Key Calculations ...................................... 2
BT 115 Refresher Math ................................................. 3
Total 5

COMPUTER APPLICATIONS SOFTWARE - MAJOR #2202

This certificate option prepares students for computer applications certification. Students are required to earn grades of “C” or better.

CERTIFICATE

Student Learning Outcome:
1. Demonstrate proficiency in office applications software.

COURSES Units
BT 9  Computer Applications I ..................................... 4
BT 10 Computer Applications II ................................... 4
BT 33 Social Media and Emerging Technologies in the Workplace .................................................. 3
BT 106 Computer Keyboarding .................................... 1.5
Total 12.5
FOUNDATIONS FOR THE OFFICE PROFESSIONAL
- MAJOR #2326

The Foundations for the Office Professional will allow students to gain fundamental skills needed to work as an Office Professional.

CERTIFICATE

Student Learning Outcomes:
1. Type 20 words per minute.
2. Exhibit positive interpersonal skills.
3. Use professional terminology in verbal and written communication.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 28 Microsoft Word I</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 106 Computer Keyboarding</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 115 Refresher Math</td>
<td>3</td>
</tr>
<tr>
<td>BT 116 Spelling and Vocabulary Building</td>
<td>2</td>
</tr>
<tr>
<td>BT 121 Working Relationships</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 127 Microsoft Outlook and E-Mail</td>
<td>1</td>
</tr>
<tr>
<td>BT 134 Exploration of Careers in Business</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>11.5</strong></td>
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</tbody>
</table>

MEDICAL OFFICE ASSISTANT
- MAJOR #2243 – FORMERLY MEDICAL BILLING ASSISTANT

This certificate option is designed to meet the training needs for qualified entry level employment in the medical office setting. Students are required to earn grades of “C” or better in all courses.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Perform basic administrative duties in a medical office using appropriate technology.
2. Support billing and collections by applying knowledge of coding and procedures and insurance programs.
3. Communicate effectively and according to legal guidelines in a professional health care setting.

COURSES

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 1 Computer Document Processing I</td>
<td>4</td>
</tr>
<tr>
<td>BT 23 Job Search and Workplace Skills</td>
<td>3</td>
</tr>
<tr>
<td>BT 24/CIT 31 Beginning Excel</td>
<td>1</td>
</tr>
<tr>
<td>BT 104 Ten-Key Calculations</td>
<td>2</td>
</tr>
<tr>
<td>BT 112 Business English</td>
<td>3</td>
</tr>
<tr>
<td>BT 127 Microsoft Outlook and E-Mail</td>
<td>1</td>
</tr>
<tr>
<td>BT 134 Exploration of Careers in Business, or Work Experience (Cooperative), Occupational</td>
<td>1-2</td>
</tr>
<tr>
<td>BT 19 Medical Office Vocabulary</td>
<td>1</td>
</tr>
<tr>
<td>BT 143 Medical Administrative Assistant</td>
<td>2.5</td>
</tr>
<tr>
<td>BT 144 Medical Management Software</td>
<td>2</td>
</tr>
<tr>
<td>BT 148 Medical Insurance &amp; Billing Concepts</td>
<td>2.5</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>23-24</strong></td>
</tr>
</tbody>
</table>

MICROSOFT OFFICE FOUNDATIONS - MAJOR #2325

This certificate will allow students to gain fundamental skills needed to work in an office setting, geared toward students returning to school with limited skills. The certificate could be completed in one semester.

CERTIFICATE

Student Learning Outcome:
1. Given a business scenario, select and use appropriate application programs(s) from Microsoft Office to create a solution addressing the scenario.

COURSES

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 24 Beginning Excel, or</td>
<td></td>
</tr>
<tr>
<td>BT 9 Computer Applications I</td>
<td>1-4</td>
</tr>
<tr>
<td>BT 28 Microsoft Word I</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 126 Automated Business Records, or</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 9 Computer Applications I</td>
<td>1-4</td>
</tr>
<tr>
<td>BT 127 Microsoft Outlook and E-Mail</td>
<td>1</td>
</tr>
<tr>
<td>BT 130 Beginning PowerPoint, or</td>
<td>1-4</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>5.5-8.5</strong></td>
</tr>
</tbody>
</table>

MICROSOFT WORD - MAJOR #2323

This option is designed to assist students pursuing Microsoft Word certification. Students are required to earn grades of “C” or better in all courses.

CERTIFICATE

Student Learning Outcome:
1. Demonstrate the advanced features of Microsoft Word.

COURSES

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 28</td>
<td>1.5</td>
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<tr>
<td>BT 29</td>
<td>1.5</td>
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<td><strong>Total</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

CLERICAL TRAINING – MAJOR #247V

This option will develop and improve skills for those desiring office employment and leads to a certificate. Emphasis on records management, keyboarding, grammar, ten-key, MS Word, MS Excel, human relations, telephone techniques, resume/interview, and computer literacy. Students are required to perform at 70 percent or better for successful completion of the program.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Use technology effectively in an office environment.
2. Type a minimum of 30 words per minute.
3. Key a minimum of 110 correct strokes per minute on a ten-key calculator.

COURSES

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>BT 370A Office Assistant Applications</td>
<td>300</td>
</tr>
<tr>
<td>BT 370B Office Assistant Applications</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600</strong></td>
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</tbody>
</table>
CHEMISTRY – MAJOR #6320

Chemistry is often called the “central science” since it draws from mathematics and physics and forms a necessary background for quality control programs in industry and agriculture, and criminal evidence analysis in forensics. To earn the Certificate in Chemistry, students must complete a minimum of 39-45 required semester units of program required classes. Students must maintain a minimum 2.0 GPA, including grades of C or higher in the courses taken to fulfill the certificate. This is not a transfer degree program. Students should consult with a counselor when planning to complete the certificate for more information. After earning a chemistry certificate, students will have the knowledge and skills required to enter the workforce as a chemical technician. These will include laboratory skills (bench-top and instrument operation), computational skills, and communication skills. There are currently no other similar programs within the State Center Community College District. There are not any enrollment limitations. The prerequisite courses vary for each individual class. For the first semester, these include MATH 103, and eligibility for CHEM 1A and ENGL 1A.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. As a result of the program, students will demonstrate laboratory skills to be successful in subsequent courses and/or on the job.
2. As a result of the program, students will master concept and content to be successful in subsequent courses and/or on the job.
3. As a result of the program, students will master computational skills to be successful in subsequent courses and/or on the job.
4. As a result of the program, students will effectively communicate the results of chemistry laboratory investigations.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A</td>
<td></td>
</tr>
<tr>
<td>CHEM 1B</td>
<td></td>
</tr>
<tr>
<td>CHEM 2A</td>
<td></td>
</tr>
<tr>
<td>CHEM 28A</td>
<td></td>
</tr>
<tr>
<td>CHEM 18L</td>
<td></td>
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<tr>
<td>CHEM 20</td>
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<tr>
<td>CHEM 100I</td>
<td></td>
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<tr>
<td>ENGL 1A</td>
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<tr>
<td>MATH 11</td>
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Total 30-34

ELECTIVES: Select a minimum of 3 courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 5</td>
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</tr>
<tr>
<td>BA 33</td>
<td></td>
</tr>
<tr>
<td>BA 18</td>
<td></td>
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<td>BIOL 6</td>
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<td>BIOL 7</td>
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<td>BIOL 46</td>
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<tr>
<td>BT 6</td>
<td></td>
</tr>
<tr>
<td>BT 23</td>
<td></td>
</tr>
</tbody>
</table>

Total 3-9

CERTIFICATE IN CHEMISTRY - MAJOR #6320

Chemistry is often called the “central science” since it draws from mathematics and physics and forms a necessary background for quality control programs in industry and agriculture, and criminal evidence analysis in forensics. After earning a chemistry certificate, students will have the knowledge and skills required to enter the workforce as a chemical technician. These will include laboratory skills (bench-top and instrument operation), computational skills, and communication skills.

CERTIFICATE

Student Learning Outcome:
1. As a result of the program, students will demonstrate laboratory skills to be successful in subsequent courses and/or on the job.
2. As a result of the program, students will master concept and content to be successful in subsequent courses and/or on the job.
3. As a result of the program, students will master computational skills to be successful in subsequent courses and/or on the job.
4. As a result of the program, students will effectively communicate the results of chemistry laboratory investigations.

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 18L</td>
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<tr>
<td>CHEM 20</td>
<td></td>
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<tr>
<td>CHEM 100I</td>
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</table>

RECOMMENDED SEQUENCE

First Term

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CHEM 18L</td>
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</table>

Second Term

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 20</td>
<td></td>
</tr>
</tbody>
</table>

CHICANO-LATINO STUDIES

- FORMERLY CULTURAL STUDIES, LA RAZA – MAJOR #7661

This program is designed to focus on Mexican-American history, heritage, and culture. Chicano-Latino Studies offers a broad interdisciplinary approach to the study of society and culture. The curriculum provides students with the strong academic background helpful to those planning careers in law, health, education, social work, business, and industry. Chicano-Latino Studies provides the knowledge and skills necessary to help students understand, communicate, and appreciate the rich cultural diversity in American society through the study of the Mexican-American and broader Latino community.
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Students will demonstrate critical thinking and problem solving skills across disciplines as they relate to the Chicano-Latino community.
2. Students will demonstrate competency in oral, written, and research skills.
3. Students will demonstrate an understanding of, and an ability to critically analyze and interpret, cultural expressions of Chicanos and Latinos.
4. Students will acquire a comprehensive knowledge and understanding of Chicano-Latino history, culture, arts, and socio-political issues.
5. Students will demonstrate a commitment to active citizenship, and develop leadership skills and an understanding of social justice principles and their application in order to promote positive social change in the Chicano-Latino community and the broader society.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>CLS 12</td>
<td>Mexican American History</td>
<td>3</td>
</tr>
<tr>
<td>CLS 21</td>
<td>Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

COURSE OPTIONS: Select 11 Units

AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society | 3 |
CLS 13 Politics and the Chicano-Latino Community | 3 |
CLS/SOC 14 Sociology of the Mexican American Community | 3 |
CLS 17A Beginning Mexican Folk Dance | 3.5 |
CLS 18 Latin Jazz Ensemble | 2 |
CLS 20 Chicoano Art | 3 |
CLS 22 Art of the Ancient Americas | 3 |
CLS/WSTS 24 La Chicana and Latina | 3 |
CLS 27B Advanced Mexican Folk Dance | 3.5 |
CLS/ANTHRO 28 Ancient Mexico | 3 |
CLS/HIST 29 History of Mexico, Colonial to Contemporary Period | 3 |
CLS 30 Migration and the Family: Social and Psychological Perspectives | 3 |
CLS 33 Community Involvement: Service Learning | 3 |

Recommended Electives: Students are encouraged to include Spanish classes as part of their college program.

Note: An associate in arts degree will be awarded to the candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 20 units of course work as listed above. Associate degree requirements are listed in the Graduation Requirements section of this catalog. General Education requirements for transfer certification are listed in the Transfer Requirements section of this catalog.

CHILD DEVELOPMENT

CHILD DEVELOPMENT - MAJOR #5615

The Associate in Science degree in Child Development is designed to prepare students to work with young children in a variety of early care and education settings. Completion of the requirements for the Associate in Science degree will fulfill the requirements to obtain the California Child Development Permit at the Teacher level which qualifies the student to work in a State of California funded child development center or preschool.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 3</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 6</td>
<td>Health, Safety and Nutrition in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 15</td>
<td>Diversity and Culture in Early Childhood Education Programs</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 20</td>
<td>Observation and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 37A</td>
<td>Early Childhood Practicum</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
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</table>

Course Options - Group A: Select 3 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHDEV 16</td>
<td>Introduction to Early Intervention</td>
</tr>
<tr>
<td>CHDEV 17A</td>
<td>Infant and Toddler Practicum</td>
</tr>
<tr>
<td>CHDEV 37B</td>
<td>Advanced Practicum in Early Childhood Education</td>
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</tbody>
</table>

Course Options - Group B - Select 3 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 5</td>
<td>Parent Education</td>
</tr>
<tr>
<td>CHDEV 9</td>
<td>Music, Movement and Drama for Young Children</td>
</tr>
</tbody>
</table>
EARLY CHILDHOOD EDUCATION – FORMERLY CHILD DEVELOPMENT – MAJOR #5616

The Certificate of Achievement in Early Childhood Education is designed to prepare students to work with young children in a variety of early care and education settings. Completion of the Certificate of Achievement fulfills the child development coursework requirement for the California Child Development Permit at the Teacher level.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children’s social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.

REQUFRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 1</td>
<td>Principles and Practices of Teaching</td>
<td></td>
</tr>
<tr>
<td>CHDEV 3</td>
<td>Introduction to Curriculum</td>
<td></td>
</tr>
<tr>
<td>CHDEV 6</td>
<td>Health, Safety and Nutrition in Early Childhood</td>
<td></td>
</tr>
<tr>
<td>CHDEV 15</td>
<td>Diversity and Culture in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>CHDEV 20</td>
<td>Observation and Assessment</td>
<td></td>
</tr>
<tr>
<td>CHDEV 37A</td>
<td>Early Childhood Practicum</td>
<td></td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td></td>
</tr>
</tbody>
</table>

Total 24

EARLY CHILDHOOD EDUCATION FOR TRANSFER

– MAJOR #5605

Majoring in Child Development prepares students for jobs in a variety of early care and education settings as well as in related fields working with children and families. The associate in science in Early Childhood Education for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the associate in science transfer degree, students must complete 60 semester or 90 quarter units that are eligible for transfer to the CSU including either IGETC or CSU GE Breadth and at least 18 units, as defined by the community college, in a major or area of emphasis. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education of young children.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children’s social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.
### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 3</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 6</td>
<td>Health, Safety and Nutrition in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 15</td>
<td>Diversity and Culture in Early Childhood Education Programs</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 20</td>
<td>Observation and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 37A</td>
<td>Early Childhood Practicum</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

### CHILD DEVELOPMENT – FORMERLY ASSOCIATE TEACHER – MAJOR #5618

The Certificate of Achievement in Child Development is designed to prepare students for entry-level positions in a variety of early care and education settings. Completion of the Certificate of Achievement fulfills the coursework requirements for the California Child Development Permit at the Associate Teacher level.

### CERTIFICATE OF ACHIEVEMENT

**Student Learning Outcomes:**

1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eighteen who are in out-of-home placement due to issues of neglect and/or abuse.
2. Apply effective guidance and interaction strategies that support children in out-of-home placements in social learning, identity and self-confidence.
3. Develop strategies that support relationships between children and their birth families, foster families, and child welfare staff.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 3</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

### CHILD WELFARE – FORMERLY FOSTER CARE – MAJOR #5681

The Certificate of Achievement in Child Welfare is designed to prepare students to work with children and families who are part of the child welfare system. Students will gain a basic understanding of the child welfare system and various community resources. They will also learn basic interventions and techniques to support children and families receiving services through the child welfare system.

### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 1</td>
<td>Principles and Practices of Teaching Young Children</td>
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</tr>
<tr>
<td>CHDEV 3</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 6</td>
<td>Health, Safety and Nutrition in Early Childhood Education</td>
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<td>CHDEV 15</td>
<td>Diversity and Culture in Early Childhood Education Programs</td>
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<tr>
<td>CHDEV 20</td>
<td>Observation and Assessment</td>
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<td>CHDEV 30</td>
<td>Child, Family and Community</td>
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<td>CHDEV 37A</td>
<td>Early Childhood Practicum</td>
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</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

### EARLY CHILDHOOD PARAPROFESSIONAL – MAJOR #5912

The Early Childhood Paraprofessional Certificate of Achievement prepares students to work as paraprofessionals in preschool through grade 12 (K-12) school settings. Completing the certificate satisfies the federal No Child Left Behind requirements for employment in a school districts and is the foundation for the Associate degrees for Transfer in Elementary Education or Early Childhood Education.

### CERTIFICATE OF ACHIEVEMENT

**Student Learning Outcomes:**

1. Demonstrate introductory subject matter competency required for working in preschool to grade 12 school settings.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for working in preschool to grade 12 classrooms.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3</td>
<td>Introduction to Life Science</td>
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<tr>
<td>CHDEV 1</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 3</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/EDUC 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 38</td>
<td>Lifespan Development</td>
<td>3</td>
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<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 30</td>
<td>Introduction to Teaching</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
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</tbody>
</table>
ENGL 125  Writing Skills for College ........................................4
GEOG 4A  World Geography, or
GEOG 4B  World Geography ..................................................3
HIST 11  History of the United States to 1877 ..........................3
LING 11  Introduction to Language for Educators ......................3
MATH 201  Elementary Algebra .............................................5

No Child Left Behind legislation requires paraprofessionals to complete 48 units of college coursework or to pass an employer-administered exam.

EARLY INTERVENTION – FORMERLY EARLY INTERVENTION ASSISTANT - MAJOR #5621

The Associate in Science degree in Early Intervention is designed to prepare students to work with infants, toddlers and young children with disabilities and other special needs in early intervention settings and inclusive early care and education settings. A student who completes the certificate is qualified to work at the Early Intervention Assistant I level of the California Early Start Personnel Model. Completing the Early Intervention Assistant Certificate plus the associate degree in Child Development qualifies a student to work at the Early Intervention Assistant II level of the California Early Start Personnel Model. The Early Intervention Assistant certificate units apply to the associate degree in Child Development and Associate Degree for Transfer in ECE.**

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education.
2. Design, implement and evaluate environments and activities that support positive developmental play and learning outcomes for all young children.
3. Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.
4. Develop strategies that promote partnerships between programs, teachers, families and their communities.
5. Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the early care and education profession.
6. Develop and apply strategies that provide support and early intervention to infants, 0-3, who have disabilities and other special needs and their families, in the natural environment.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHDEV 3</td>
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</tr>
<tr>
<td>CHDEV 6</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 11</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 15</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 16</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 17A</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 20</td>
<td>3</td>
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<tr>
<td>CHDEV 30</td>
<td>3</td>
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<td>CHDEV 39</td>
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<td>CHDEV 48</td>
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<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

** To qualify for the AS in Child Development in addition to the Early Intervention Assistant Certificate, complete CD 37A during second year.
FAMILY CHILD CARE – MAJOR #5571

The Certificate of Achievement in Family Care is designed to prepare students to become family child care providers, individuals who are licensed to care for children in their homes. Completion of the Certificate of Achievement fulfills the coursework requirements for the California Child Development Permit at the Associate Teacher level.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight.
2. Design, implement and evaluate environments and activities that support positive developmental play outcomes for young children.
3. Apply effective guidance and interaction strategies that support children's social and emotional development.
4. Apply ethical standards and professional behaviors that promote partnerships between programs, teachers, families and their communities.

REQUIRED COURSES

- CHDEV 3 Introduction to Curriculum................................. 3
- CHDEV 6 Health, Safety and Nutrition in Early Childhood Education................................. 3
- CHDEV 30 Child, Family and Community ................................. 3
- CHDEV 39 Child Growth and Development................................. 3
- CHDEV 53 Family Child Care Programs................................. 3

Total 15

INFANT AND TODDLER SPECIALIST – MAJOR #5619

The Certificate of Achievement in Infant and Toddler Specialist is designed to prepare students to work with children ages 0-3 in a variety of early care and education settings. Completion of the Certificate fulfills the child development coursework requirement for the California Child Development Permit at the Teacher level.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate knowledge of the needs, the characteristics and multiple influences on development of children birth to age three.
2. Design, implement and evaluate environments and activities that support positive developmental outcomes for young children.
3. Apply effective guidance and interaction strategies that support children's social and emotional development.
4. Apply ethical standards and professional behaviors that promote partnerships between programs, teachers, families and their communities.

REQUIRED COURSES

- CHDEV 1 Principles and Practices of Teaching Young Children............................................... 3
- CHDEV 3 Introduction to Curriculum............................................... 3
- CHDEV 6 Health, Safety and Nutrition in Early Childhood Education............................................... 3
- CHDEV 17A Infant and Toddler Practicum............................................... 3
- CHDEV 17B Advanced Infant and Toddler Development............................................... 3
- CHDEV 20 Observation and Assessment............................................... 3
- CHDEV 30 Child, Family and Community............................................... 3
- CHDEV 39 Child Growth and Development............................................... 3

Suggested sequence of courses:
First Semester
- CHDEV 1 Principles and Practices of Teaching Young Children............................................... 3
- CHDEV 3 Introduction to Curriculum............................................... 3
- CHDEV 6 Health, Safety and Nutrition in Early Childhood Education............................................... 3
- CHDEV 39 Child Growth and Development............................................... 3

Second Semester
- CHDEV 17A Infant and Toddler Practicum............................................... 3
- CHDEV 20 Observation and Assessment............................................... 3

Third Semester
- CHDEV 17B Advanced Infant and Toddler Development............................................... 3
- CHDEV 30 Child, Family and Community............................................... 3

Total 24

Qualifications to Teach in Early Care and Education Programs

Privately Operated Center Based Programs

Candidates may meet the California State Department of Social Service requirements by completion of 12 units of Child Development coursework. The 12 units should include at least one course from each of the following:

1. Child Development/Psychology 39 (DSS*1)
2. Child Development 30. (DSS*2)
3. Child Development 3, 9, 10, 37A/B, 43 (DSS*3)

Students who plan to work with infants must complete 12 units of child development including:

Child Development 17A, Infant/Development-Birth to Age 3 (DSS*4)

Students who plan to work with children ages 6-12 years must complete 12 units including:

Students who wish to qualify as a Child Development Center Director must complete Child Development 40A (DSS*6) in addition to the required 12 units.

Note: The Child Development Department recommends that students take Child Development 6, Child Health and Safety, 3 units (DSS*7). State law requires that an individual who has completed Child Care Health and Safety Training must be on the premises of a child development center at all times. Child Development 6 fulfills this requirement.
The college transcript provides the documentation necessary for the individual's academic qualifications to teach in the privately operated center based program.

Publicly Funded Early Care and Education Centers
The California Commission on Teacher Credentials issues the Child Development Permit which is required for employment in children's centers and preschools that receive funding from the State of California. Each level of the Child Development Permit Matrix requires specific coursework to be completed with a grade of "C" or better and work experience in an early care and education program (birth to eight years.) Work experience requirements are noted at each level.

The applicant files a completed application verifying the following information to the California Commission of Teacher Credentials. Further information on the application process, including sources of funding to pay for the application fee, may be obtained from the Child Development Department.

**Associate Teacher level: 12 units**
(Experience: 50 days of 3 + hours per day within 2 years of application)
Child Development 39
Child Development 30
Child Development 3
plus 3 additional units of child development coursework

**Teacher level: 40 units**
(Experience: 175 days of 3 + hours per day within 4 years of application)
Completion of the Associate Teacher level (above) plus 12 additional units in Child Development and 16 units of general education including one course that meets FCC graduation requirements from each of the following areas:
- English
- Math or Science
- Social Sciences
- Humanities

* Alternative qualifications: an AS degree in Child Development which includes one supervised field experience course. No work experience required

**Master Teacher level:**
(Experience: 350 days of experience within 4 years, including 100 days of supervising adults)
Complete the Teacher level requirements listed above, plus:
Child Development 45
6 units of specialized coursework in Child Development
(A list of Fresno City College specializations may be obtained from the Child Development Department)

*Alternative qualifications for Master Teacher and Site Supervisor levels:
- BA degree or higher with 12 units of child development
- Plus a supervised field work experience course (Child Development 37A or 37B; Child Development 17A)

**Family Child Care**
A family child care provider is an individual who is licensed to care for up to six children in his/her home. State law requires that the family child care provider must complete 15 hours of child health and safety. This requirement is satisfied by Child Development 6, Child Care, Health and Safety, 3 units. There are currently no additional educational requirements for family child care providers, however, the Child Development Department recommends completion of the Family Child Care Certificate Program.

**Elementary School Teaching Credential**
Students wishing to teach in an elementary school must take the Liberal Studies (Credential) major.
Please note that most child development classes listed above do not count toward the Liberal Studies (Credential) major.

*This material has been prepared as carefully as possible. Fresno City College does not assume responsibility for inaccuracies or changes in the information contained herein after the date of publication.*

**COMMUNICATION FOR TRANSFER – FORMERLY SPEECH – MAJOR #5432**

The Associate in Arts in Communication Studies for Transfer degree program is designed to prepare students for further study or employment in fields requiring effective and ethical human communication. Communication courses focus on how people use messages to generate meanings within and across various contexts, cultures, channels, and media.

The Associate in Arts in Communication Studies for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Comm. Studies AA-T degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including (i) the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements, and (ii) the 18 semester units specified by the Communication Studies degree. These requirements must be obtained with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.
 ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate understanding of core communication theories and principles.
2. Organize, develop, and deliver an effective presentation.
3. Critically evaluate various communication situations.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 2</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 4</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 8</td>
<td>Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 25</td>
<td>Argumentation</td>
<td>3</td>
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</tbody>
</table>

Total 15

Choose 3 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>COMM 20</td>
<td>Community Involvement</td>
<td>2-3</td>
</tr>
<tr>
<td>COMM 26</td>
<td>Intercollegiate Forensics Laboratory</td>
<td>1-3</td>
</tr>
<tr>
<td>JOURN 1</td>
<td>Introduction to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 3</td>
<td>Newswriting</td>
<td>3</td>
</tr>
</tbody>
</table>

15

COMMUNICATION SKILLS FOR PROFESSIONALS
- MAJOR #5433

The Communication Skills for Professionals Certificate program is designed to enable students to achieve recognition of development in such areas as public speaking, group problem solving and communication, leadership, persuasion and healthy interpersonal relationships in the workplace. In these courses, students will learn how to sharpen communication skills as well as deal with difficult situations with a flexible, genuine and self-confident approach. Students will also learn how to create persuasive messages based on a sound theoretical foundation and apply influence strategies to gain commitment from others and foster collaboration. The certificate can be completed either in traditional face-to-face classes or online hybrid courses.

CERTIFICATE

Student Learning Outcomes:
1. Using the workplace as a context, students will construct effective messages that gain commitment from others and foster collaboration.
2. Respond appropriately and genuinely to messages within the workplace.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 2</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 4</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 8</td>
<td>Group Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 12

COMPUTER AIDED DRAFTING AND DESIGN - FORMERLY DRAFTING - MAJOR #3051

This degree is designed for individuals seeking a career in drafting/CAD. The drafting field serves a number of vocations, professions, and industries. The courses and training are designed along practical lines as required by industry so that students, upon completion of their training, are better qualified to obtain employment in drafting/CAD or related occupations. Additional courses are necessary to fulfill the requirements for the Associate in Science degree. Please refer to the current catalog for more information.

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:
1. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a portfolio representing their abilities to industry standards as determined by the instructor.
2. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a presentation model from a solid model assembly using various CAD systems to industry standards as determined by the instructor.

First Year - First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CADD 14</td>
<td>2D CAD I.</td>
<td>3</td>
</tr>
<tr>
<td>CADD 16</td>
<td>3D Solid Modeling I.</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12</td>
<td>Drafting Practices</td>
<td>3</td>
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Total 12

First Year - Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CADD 22</td>
<td>Mechanical Drawing I.</td>
<td>3</td>
</tr>
<tr>
<td>CADD 24</td>
<td>2D CAD II.</td>
<td>3</td>
</tr>
<tr>
<td>CADD 26A</td>
<td>3D Solid Modeling II.</td>
<td>3</td>
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<tr>
<td>CADD 28</td>
<td>Product Development I.</td>
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Total 12

Second Year - First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CADD 32</td>
<td>Reverse Engineering I.</td>
<td>3</td>
</tr>
<tr>
<td>CADD 36A</td>
<td>3D Solid Modeling III.</td>
<td>3</td>
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Total 6

Second Year - Second Semester

<table>
<thead>
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<tbody>
<tr>
<td>CADD 42</td>
<td>Mechanical Drawing III.</td>
<td>3</td>
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</table>

Total 3

Note: Students planning to receive the AS degree must meet the associate in science degree requirements on page 35.
COMPUTER AIDED DRAFTING AND DESIGN
FORMERLY DRAFTING - MAJOR #3051

This certificate is designed for individuals seeking a career in drafting/CAD. The drafting field serves a number of vocations, professions, and industries. The courses and training are designed along practical lines as required by industry so that students, upon completion of their training, are better qualified to obtain employment in drafting/CAD or related occupations.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a portfolio representing their abilities to industry standards as determined by the instructor.
2. In an applied setting, given instructions, demonstrations, media presentations and hands-on projects the student will be able to create a presentation model from a solid model assembly using various CAD systems to industry standards as determined by the instructor.

First Year - First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
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<td>CADD 14</td>
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First Year - Second Semester

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<td>CADD 24</td>
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Second Year - First Semester

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2D CAD TECHNICIAN – MAJOR #3053

This certificate is designed for individuals seeking a career in drafting/CAD that utilizes 2D. The courses and training are designed to meet the requirements of many industries so that students, upon completion of their certificate, are better qualified to obtain employment in occupations requiring 2D drafting/CAD.

CERTIFICATE

Student Learning Outcomes:
1. Use orthographic projection methods to sketch the three standard views of objects.
2. Modify geometry on existing CAD drawings.
3. Create and modify symbols (blocks) in a drawing.

First Year - First Semester

<table>
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<th>Units</th>
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3D CAD TECHNICIAN – MAJOR #3054

This certificate is designed for individuals seeking employment in drafting/CAD that utilizes 3D solid modeling. The courses and training are designed to meet the requirements of many industries so that students, upon completion of their certificate, are better qualified to obtain employment in occupations requiring 3D drafting/CAD.

CERTIFICATE

Student Learning Outcomes:
1. Create advanced drawings with dimensions and annotations of 3D solid models and assemblies.
2. Create advanced assemblies with components created in the context of an assembly and sub-assemblies.

REQUIRED COURSES

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RECOMMENDED SEQUENCE

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3D CAD/CAM – MAJOR #3055

This certificate is designed for individuals seeking employment in 3D CAD/CAM that utilizes 3D solid modeling and CNC machining. The courses and training are designed to meet the requirements of the manufacturing industry so that students, upon completion of their certificate, are better qualified to obtain employment in occupations requiring 3D CAD/CAM.

CERTIFICATE

Student Learning Outcomes:
1. Create advanced drawings with dimensions and annotations of 3D solid models and assemblies.
2. Operate a CNC machine in a laboratory environment.

REQUIRED COURSES

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<tr>
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<th>Units</th>
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<td>CADD 26A</td>
<td>3D Solid Modeling II</td>
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<td>CAM 5</td>
<td>CNC Operation &amp; Maintenance for Machinist</td>
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<td>CNC Mill Programming &amp; Operation I</td>
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Total 15.5

RECOMMENDED SEQUENCE

First Year – First Semester

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First Year – Second Semester

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Total 9

COMPUTER AIDED MANUFACTURING

– FORMERLY MANUFACTURING TECHNOLOGY & MACHINIST
– MAJOR #8271

The CAM Program is designed for students who have a strong interest in becoming a CAD/CAM/CNC Machinist & Operator. Core courses ensure students with a knowledgeable foundation to operate and setup computer numerical control machines using our Computer Aided Manufacturing laboratory. MasterCAM and Fusion 360 CAD/CAM software are the designing softwares used to create 3D Designs for the generation of G and M codes for CNC machined parts. The Required Courses are the designing softwares used to create 3D Designs for the generation of G and M codes for CNC machined parts. The Required Courses are

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Demonstrate the ability to interpret and apply computer software commands for creating mechanical drawings for the process of machining accurate parts.
2. Setup and operate Computer Numerical Control Machines.
3. Analyze and apply shop safety.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>AT 10</td>
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<tr>
<td>AT 40</td>
<td>Preparing for Employment Opportunities</td>
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<tr>
<td>AT 140</td>
<td>Introduction to Machine Shop</td>
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<td>CAM 5</td>
<td>CNC Operation &amp; Maintenance for Machinist</td>
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<td>CAM 10</td>
<td>CNC Mill Programming &amp; Operation I</td>
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<td>CAM 15</td>
<td>CNC Programming for Machinist</td>
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<td>CAM 20</td>
<td>CNC Mill/Programming &amp; Operation II</td>
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<td>CAM 26</td>
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<td>Multi-Axis Milling &amp; Programming</td>
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Total 28

CAD TECHNICIAN I – MAJOR #3052

These courses provide students with the basic skills and knowledge of drafting and CAD.

CERTIFICATE

Student Learning Outcomes:
1. Use orthographic projection methods to sketch the three standard views of objects.
2. Modify geometry on existing CAD drawings.
3. Draw 2D sketches with dimensions and geometric relations used to create features.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CADD 14</td>
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<td>3D Solid Modeling I</td>
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<tr>
<td>DRAFT 12</td>
<td>Drafting Practices</td>
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Total 9

COMPUTER AIDED MANUFACTURING

– MAJOR #8271

The CAM Certificate of Achievement Program is designed for students who have a strong interest in becoming a CAD/CAM/CNC Machinist & Operator. Core courses ensure students with a knowledgeable foundation in 3D part designing with Mastercam and Fusion 360 CAD/CAM software for the purpose of Tool Programming. The Required Courses are

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate the ability to interpret and apply computer software commands for creating mechanical drawings for the process of machining accurate parts.
2. Setup and operate Computer Numerical Control Machines.
3. Analyze and apply shop safety.
COMPUTER INFORMATION TECHNOLOGY
- FORMERLY INFORMATION SYSTEMS

COMPUTER INFORMATION SYSTEMS
- MAJOR #2701

This program provides a strong academic preparation in Information Systems and Computer Science. The courses give students the fundamentals in operating systems, information security, networking, current programming languages and development platforms. This major will prepare students for transfer as an Information Systems major to universities as well as entry-level employment.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcome:
1. Given a business related problem, design and develop a software solution using a programming language.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 15</td>
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<tr>
<td>CIT 45</td>
<td>Data Communications</td>
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<tr>
<td>CIT 48B</td>
<td>A+ and Security Principles</td>
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<td>CIT 60</td>
<td>Beginning Visual Basic</td>
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<tr>
<td>CIT 63</td>
<td>Beginning Java Programming</td>
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<tr>
<td>CIT 66</td>
<td>Beginning C++ Programming</td>
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<tr>
<td>CIT 70</td>
<td>Beginning Swift Programming</td>
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<td>CIT 93</td>
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<td>BA 28</td>
<td>E-Law and Ethics</td>
<td>3</td>
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<tr>
<td>CIT 28</td>
<td>Client/Server Databases</td>
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<td>CIT 40</td>
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<tr>
<td>CIT 50</td>
<td>Fundamentals of Networking</td>
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<td>CIT 58C</td>
<td>Security+ Fundamentals</td>
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<td>CIT 58F</td>
<td>Ethical Hacking</td>
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<td>Android Programming Applications</td>
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<td>CIT 69</td>
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Note: Requires additional general education units for AS degree.

ANDROID APPLICATION DEVELOPER
- MAJOR #2730

Designed to assist students who would like to develop mobile applications for Android devices.

CERTIFICATE

Student Learning Outcome:
1. Given a business programming scenario, create an interactive mobile application as a solution to the scenario. Students will use Android programming software to design, code, debug and deploy an object-oriented program.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>CIT 15</td>
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<td>CIT 65</td>
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APPLE IOS DEVELOPER – MAJOR #2731

Designed to assist students who would like to develop mobile applications for Apple devices.

CERTIFICATE

Student Learning Outcome:
1. Given a business programming scenario, create an interactive mobile application as a solution to the scenario. Students will use iOS programming software to design, code, debug and deploy an object-oriented program.

REQUIRED COURSES

<table>
<thead>
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<tr>
<td>CIT 69</td>
<td>iOS Programming Applications</td>
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<td>Beginning Swift Programming</td>
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CYBER TECHNICIAN SPECIALIST – MAJOR #2751

This option is designed to meet the training needs for qualified entry-level hardware/software and basic security personnel.

CERTIFICATE

Student Learning Outcome:
1. Prepare students for an entry level position in the IT/Cybersecurity field.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<td>IT+ Fundamentals</td>
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<td>CIT 48B</td>
<td>A+ and Security Principles</td>
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CYBERSECURITY – MAJOR #2750

The California Community College’s Information Technology Cyber Security Certificate Collaborative Program is a fully online, zero textbook cost program designed to prepare students for entry level cyber security positions across industry and government and also prepare students to sit for nationally recognized certification exams from Cisco and CompTIA.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Create and implement security policies for an organization.
2. Configure computer and networks to protect information from exfiltration.

REQUIRED COURSES

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>Data Communications</td>
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<td>CIT 48A</td>
<td>IT+ Fundamentals</td>
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<td>CIT 48B</td>
<td>A+ and Security Principles</td>
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<td>Network Security</td>
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<td>Cybersecurity Operations</td>
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<td>CIT 58C</td>
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RECOMMENDED SEQUENCE

Semester 1

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Semester 2

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INFORMATION SECURITY I – MAJOR #2714

Designed to meet the training needs for qualified entry-level computer network security professionals. It is also designed to help prepare students for industry standard security certifications like CompTIA Security+, CyberSecurity Information Systems Security Professional (CISSP) and others.

CERTIFICATE

Student Learning Outcomes:

1. Given a business scenario, assess and control risk, create a blueprint for security, control network remote access, and manage e-mail and website security.

REQUIRED COURSES

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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RECOMMENDED SEQUENCE

Semester 1

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Semester 2

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<td><strong>Total</strong></td>
<td><strong>13</strong></td>
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</tbody>
</table>

INFORMATION SECURITY II – MAJOR #2715

Designed to meet the training needs for qualified entry-level computer network security professionals. It is also designed to help prepare students for industry standard security certifications like CompTIA Security+, Security Certified Professional (SCP), and others.

CERTIFICATE

Student Learning Outcomes:

1. Given a business scenario, perform a security risk analysis, design a security policy, choose and configure a firewall, and set up a virtual private network (VPN).
2. Use hacking tools and techniques to hack web servers and wireless networks to determine the security risk and the appropriate cryptography and network security devices needed to limit the security risk of a business.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 50</td>
<td>Fundamentals of Networking</td>
<td>4</td>
</tr>
<tr>
<td>CIT 58D</td>
<td>Network Defense and Countermeasures</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58E</td>
<td>Penetration Testing</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58F</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</table>

RECOMMENDED SEQUENCE

Semester 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 50</td>
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<tr>
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<td>Ethical Hacking</td>
<td>3</td>
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Semester 2

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIT 58D</td>
<td>Network Defense and Countermeasures</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58E</td>
<td>Penetration Testing</td>
<td>3</td>
</tr>
</tbody>
</table>
MCTC NETWORKING - MAJOR #2724

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Students will be able to describe the logical and physical components of Active Directory, plan and implement an organizational unit structure, and plan and manage operations masters, and plan and implement an Active Directory infrastructure that is based on a directory service design provided by an enterprise architect.

2. Students will be able to install and upgrade to Windows XP Professional, configure and manage files systems, configure the desktop environment, use profiles to control desktop customization, configure Windows XP Professional to operate on Windows networks, and configure Windows XP Professional for mobile computing.

3. Students will be able to describe the process for designing an Active Directory infrastructure and a network infrastructure that supports Active Directory, design a site infrastructure that meets the needs of an organization, design a name resolution strategy that supports Active Directory and meets the needs of the organization.

4. Students will be able to outline best practices for the information security goals of confidentiality, integrity and availability, explain ethical practices, define vocabulary/terminology related to information security, explain the importance of planning and administrative controls, identify security threats, vulnerabilities, and countermeasures, and identify procedures for security risk management.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 28</td>
<td></td>
</tr>
<tr>
<td>CIT 50</td>
<td>4</td>
</tr>
<tr>
<td>CIT 55</td>
<td>3</td>
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<tr>
<td>CIT 60</td>
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**RECOMMENDED SEQUENCE**

Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CIT 50</td>
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<td>CIT 60</td>
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</table>

Semester 2

<table>
<thead>
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<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIT 28</td>
<td>3</td>
</tr>
<tr>
<td>CIT 55</td>
<td>3</td>
</tr>
</tbody>
</table>

**MICROCOMPUTER SOFTWARE SPECIALIST**

---

**MAJOR #2705**

Designed for the nontransfer student leading to employment as a microcomputer software specialist or similar computer specialist. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Given a computer related application software problem, trouble-shoot, identify, research, and (if possible) fix the problem.

2. Install and update software.

3. Given a business scenario, select and use an appropriate program to create a file, database, document, macro and/or program to obtain a solution addressing the scenario.

**FIRST YEAR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIT 15</td>
<td>Computer Concepts..................3</td>
</tr>
<tr>
<td>CIT 17</td>
<td>Windows..........................1.5</td>
</tr>
<tr>
<td>CIT 23</td>
<td>Spreadsheet Fundamentals...........2</td>
</tr>
<tr>
<td>CIT 26</td>
<td>Database Fundamentals...............2</td>
</tr>
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<td>CIT 161</td>
<td>Microsoft Windows Skills...........1</td>
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**Total** 9.5

**SECOND YEAR**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CIT 20</td>
<td>Microsoft Office...................3</td>
</tr>
<tr>
<td>CIT 28</td>
<td>Client/Server Databases............3</td>
</tr>
<tr>
<td>CIT 40</td>
<td>Computer Operating Systems.........4</td>
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<tr>
<td>CIT 50</td>
<td>Fundamentals of Networking.........4</td>
</tr>
</tbody>
</table>

**Total** 14

**NETWORKING/COMPUTER TECHNICIAN**

---

**MAJOR #2720**

This option is designed to meet the training needs for qualified entry-level microcomputer and networking technicians.

**ASSOCIATE IN SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Construct and apply an IP addressing scheme for a simple network problem.

2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.

3. Define and apply digital numbering systems.

4. Explain how networks are interconnected and understand how operating system software affects the hardware.

5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.
### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 23</td>
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<tr>
<td>BT 112</td>
<td>3</td>
</tr>
<tr>
<td>CIT 15</td>
<td>3</td>
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<tr>
<td>CIT 40</td>
<td>4</td>
</tr>
<tr>
<td>CIT 45</td>
<td>3</td>
</tr>
<tr>
<td>CIT 50</td>
<td>4</td>
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<tr>
<td>EST/CIT 19</td>
<td>3</td>
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<tr>
<td>EST 55A</td>
<td>3</td>
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<tr>
<td>EST 60</td>
<td>3</td>
</tr>
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<td>EST 61</td>
<td>3</td>
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</table>

**RECOMMENDED SEQUENCE**

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIT 15</td>
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</tr>
<tr>
<td>CIT 45</td>
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<tr>
<td>EST 55A</td>
<td>3</td>
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#### Second Semester

<table>
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</tr>
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<td>CIT 50</td>
<td>4</td>
</tr>
<tr>
<td>EST/CIT 19</td>
<td>3</td>
</tr>
<tr>
<td>EST 62</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

**Note:** Requires additional general education units for AS degree.

### PREPARATION IN MICROSOFT OFFICE

**– MAJOR #2710**

Designed for the nontransfer student leading to employment as a microcomputer software specialist or similar computer specialist. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

#### CERTIFICATE

**Student Learning Outcomes:**

1. Given a business scenario, select and use an appropriate application program to create a solution addressing the scenario.

2. Given a Microsoft Office related software problem, troubleshoot, identify, research, and provide assistance to users.

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 28</td>
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<tr>
<td>BT 29</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 127</td>
<td>1</td>
</tr>
<tr>
<td>CIT 20</td>
<td>3</td>
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### SECOND SEMESTER

<table>
<thead>
<tr>
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<td>CIT 24</td>
<td>2</td>
</tr>
<tr>
<td>CIT 26</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total** 6

**Note:** Courses in the program have CIT 12 or CIT 15 as prerequisites.

### SYSTEM SUPPORT SPECIALIST – MAJOR #2723

This option is designed to meet the training needs for qualified entry-level systems support personnel.

#### CERTIFICATE

**Student Learning Outcome:**

1. Given a software or hardware problem, configure, troubleshoot, and repair the computer.

**Suggested sequence of courses:**

#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIT 40</td>
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<td>CIT 45</td>
<td>3</td>
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<td><strong>Total</strong></td>
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</table>

#### Spring Semester

<table>
<thead>
<tr>
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<tr>
<td>CIT 48B</td>
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<tr>
<td>CIT 60</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

#### WEB DEVELOPER

**– FORMERLY WEBMASTER – MAJOR #2742**

This option is designed to prepare students for work in the computer industry as Web Developers. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

#### ASSOCIATE IN SCIENCE DEGREE

**Student Learning Outcome:**

1. Given a business scenario create an interactive client-side and/or server-side, data driven website using appropriate tools to create a solution addressing the scenario.

#### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 82</td>
<td>3</td>
</tr>
<tr>
<td>CIT 85</td>
<td>3</td>
</tr>
<tr>
<td>CIT 90</td>
<td>4</td>
</tr>
<tr>
<td>CIT 93</td>
<td>4</td>
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</tbody>
</table>
Choose Two of the Following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 28</td>
<td>Client/Server Databases</td>
<td>3</td>
</tr>
<tr>
<td>CIT 63</td>
<td>Beginning Java Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIT 84</td>
<td>Web Development Frameworks</td>
<td>4</td>
</tr>
<tr>
<td>CIT 90</td>
<td>Beginning Go Language Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIT 94</td>
<td>Node.js</td>
<td>4</td>
</tr>
<tr>
<td>CIT 97</td>
<td>Web Development with the Go Programming Language</td>
<td>4</td>
</tr>
<tr>
<td>CIT 99</td>
<td>Introduction to Machine Learning</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21-22</strong></td>
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</tbody>
</table>

**WEB DEVELOPER – FORMERLY WEBMASTER**
- MAJOR #2742

This option is designed to prepare students for work in the computer industry as Web Developers. Completing the program with the college graduation requirements leads to an AS degree; without the graduation requirements, student is eligible for a certificate of achievement.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcome:**
1. Given a business scenario create an interactive client-side and/or server-side, data driven website using appropriate tools to create a solution addressing the scenario.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 82</td>
<td>Introduction to Web Development</td>
<td>3</td>
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<tr>
<td>CIT 85</td>
<td>HTML and CSS</td>
<td>3</td>
</tr>
<tr>
<td>CIT 90</td>
<td>Beginning Go Language Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIT 93</td>
<td>JavaScript</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
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<td>CIT 28</td>
<td>Client/Server Databases</td>
<td>3</td>
</tr>
<tr>
<td>CIT 63</td>
<td>Beginning Java Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIT 84</td>
<td>Web Development Frameworks</td>
<td>4</td>
</tr>
<tr>
<td>CIT 94</td>
<td>Node.js</td>
<td>4</td>
</tr>
<tr>
<td>CIT 97</td>
<td>Web Development with the Go Programming Language</td>
<td>4</td>
</tr>
<tr>
<td>CIT 99</td>
<td>Introduction to Machine Learning</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21-22</strong></td>
</tr>
</tbody>
</table>

**WEB PAGE DEVELOPMENT - MAJOR #2741**

This certificate option is designed to assist students who would like to develop web pages.

**CERTIFICATE**

**Student Learning Outcome:**
1. Given a business scenario create interactive web pages to create a solution addressing the scenario.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 82</td>
<td>Introduction to Web Development</td>
<td>3</td>
</tr>
<tr>
<td>CIT 85</td>
<td>HTML and CSS</td>
<td>3</td>
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<tr>
<td>CIT 93</td>
<td>JavaScript</td>
<td>4</td>
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</table>

**CONSTRUCTION – MAJOR #8091**

The construction curriculum is designed to provide students with hands-on training strengthened with technical information that will prepare them for entry into the construction industry or for their own personal construction projects. Specialty courses are available in Plumbing and Electrical to give students a greater depth of knowledge in construction.

**ASSOCIATE IN SCIENCE DEGREE**

**Student Learning Outcomes:**
1. Construct foundation forms for a slab on grade.
2. Correctly install vinyl windows in a newly framed residence.
3. Correctly install and finish drywall.
4. Install pre-hung doors.
5. Lay out and square a building foundation.
6. Install roof sheathing.

**First Year - First Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 12</td>
<td>Architectural Practice I</td>
<td>3</td>
</tr>
<tr>
<td>CONS 50</td>
<td>Basic Residential Construction</td>
<td>4</td>
</tr>
<tr>
<td>CONS 51</td>
<td>Residential Construction: Foundations and Framing</td>
<td>9</td>
</tr>
<tr>
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<td><strong>Total</strong></td>
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**First Year - Second Semester**

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ARCH 21</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>AT 21</td>
<td>Occupational Safety and Health</td>
<td>2</td>
</tr>
<tr>
<td>CONS 53</td>
<td>Residential Construction: Exterior and Interior Finish</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21-22</strong></td>
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**Second Year - First Semester**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH 22</td>
<td>Architectural Practice II</td>
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<tr>
<td>CONS 55</td>
<td>Roof Framing Systems</td>
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<tr>
<td>CONS 56A</td>
<td>Residential Plumbing 1, and</td>
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</tr>
<tr>
<td>CONS 56AL</td>
<td>Residential Wiring 1, or</td>
<td></td>
</tr>
<tr>
<td>CONS 175A</td>
<td>Residential Wiring 1, and</td>
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</tr>
<tr>
<td>CONS 175AL</td>
<td>Residential Wiring Lab 1</td>
<td>3.5-4.5</td>
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<td><strong>42.5-44.5</strong></td>
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**Second Year - Second Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CONS 56B</td>
<td>Residential Plumbing 2, and</td>
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</tr>
<tr>
<td>CONS 56BL</td>
<td>Residential Plumbing Lab 2, or</td>
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</tr>
<tr>
<td>CONS 175B</td>
<td>Residential Wiring 2, and</td>
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<tr>
<td>CONS 175BL</td>
<td>Residential Wiring Lab 2</td>
<td>3.5-4.5</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>42.5-44.5</strong></td>
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</tbody>
</table>

Note: Students qualify for the certificate of achievement upon completion of the major requirements listed above. In addition, those completing the associate degree requirements on page 35 of the catalog, upon application, will be awarded the associate in science degree.
CONSTRUCTION – MAJOR #8091

The construction curriculum is designed to provide students with hands-on training strengthened with technical information that will prepare them for entry into the construction industry or for their own personal construction projects. Specialty courses are available in Plumbing and Electrical to give students a greater depth of knowledge in construction.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Install roof sheathing.
2. Construct foundation forms for a slab on grade.
3. Correctly install vinyl windows in a newly framed residence.
4. Correctly install and finish drywall.
5. Install pre-hung doors.
6. Lay out and square a building foundation.
7. Rough wire a residential building to trade practices and code requirements.
8. Install finish electrical apparatus.

First Year - First Semester
ARCH 12 Architectural Practice I .............................................. 3
CONS 50 Basic Residential Construction ..................................... 4
CONS 51 Residential Construction: Foundations and Framing .......... 9

First Year - Second Semester
ARCH 21 Materials of Construction ........................................ 3
AT 21 Occupational Safety and Health .................................. 2
CONS 53 Residential Construction: Exterior and Interior Finish ......... 9

Second Year - First Semester
AT 130 Industrial Mathematics ............................................ 3
AT 131 Technical Report Writing ........................................ 3
CONS 55 Roof Framing Systems .......................................... 2.5
CONS 56A Residential Plumbing 1, and
CONS 56AL Residential Plumbing Lab 1, or
CONS 175A Residential Wiring 1, and
CONS 175AL Residential Wiring Lab 1 ......................... 3.5-4.5

Second Year - Second Semester
CONS 56B Residential Plumbing 2, and
CONS 56BL Residential Plumbing Lab 2, or
CONS 175B Residential Wiring 2, and
CONS 175BL Residential Wiring Lab 2 ......................... 3.5-4.5
Total 45.5-47.5

RESIDENTIAL CONSTRUCTION WIRING
– MAJOR #8092

The construction curriculum is designed to provide students with technical and hands-on training in residential wiring including introduction to the National Electrical Code.

CERTIFICATE

Student Learning Outcomes:
1. Rough wire a residential building to trade practices and code requirements.
2. Interpret the NEC as it pertains to residential wiring and apply those requirements.
3. Install finish electrical apparatus.

First Year - First Semester
CONS 175A Residential Wiring .............................................. 4
CONS 175AL Residential Wiring Lab 1 ................................. 0.5
First Year - Second Semester
CONS 175B Residential Wiring .............................................. 4
CONS 175BL Residential Wiring Lab 2 ................................. 0.5
Total 9

CRIMINOLOGY
– FORMERLY ADMINISTRATION OF JUSTICE

ADMINISTRATION OF JUSTICE FOR TRANSFER
– MAJOR #7750

Administration of justice is the study of the causes, consequences, and control of crime. The program leading to the Associate in Science in the Administration of Justice for Transfer (AS-T) is designed to acquaint students with the principles and practices of criminal justice systems in America. The curriculum allows for the development of depth in one of the subject's subsystems (law enforcement, juvenile, courts, or corrections), and also gain familiarity with the basics of all areas. It is both academic and professional in that it is an interdisciplinary attempt to relate intellectual issues and practitioner perspectives to the challenge of crime in a free society. It provides the information necessary for employment with a related agency and/or transfer to a college or university. Those completing the AS-T in Administration of Justice will be able to transfer to the California State University System, and be prepared to study in Administration of Justice, Law Enforcement, Correctional Administration, Social Science, and Pre-Law. Upon completion students will be prepared to pursue a BA/BS in Criminal Justice. To earn the transfer degree students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.
ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Reflect critically on developments in criminal justice policy and the relationship of those policies to the wider political and social environment.
2. Compare and evaluate diverse and competing arguments in disciplinary (justice system) and interdisciplinary contexts.
3. Demonstrate knowledge of the history, structure and processes of law enforcement, the judicial system, the correctional system, and juvenile justice system.
4. Define and utilize key terms, concepts, and theories in the criminal justice system.
5. Interpret, assess, and compare competing types of evidence and data.
6. Effectively communicate orally and in writing the results of their analysis and conclusions.

REQUIRED CORE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<td>CRIM 11</td>
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<td>PSY 2/2H</td>
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<td>SOC 1A</td>
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CORRECTIONAL SCIENCE OPTION – MAJOR #7731

Designed to provide specialized education for those students desiring a career in the correctional field including employment as a juvenile correctional officer, a state of California corrections officer, a jail correctional officer and a probation and parole officer. This degree is also designed to provide those students who are pursuing careers in the correctional field of criminology, the opportunity to broaden their knowledge and appreciation of the many levels of corrections and the value of correctional roles in the criminal justice system.

This degree will also serve as a primer for those students who wish to pursue a higher level of education in corrections at the university level.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcome:

1. The students will understand state and federal regulations and have knowledge of correctional systems.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
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Course Options: Select Any 16 Units

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* Choose from AFRAM 1, 2, or 4; AMINO 31, 32, or 34; ASAMER 1 or 15; or CLS 11, 12, 13, 14, 24, 28, 29, or 30.

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.
CORRECTIONAL SCIENCE OPTION – MAJOR #7731

This certificate provides specialized education for those students desiring a career in the correctional field including employment as a juvenile correctional officer, a state of California corrections officer, a jail correctional officer and parole officer.

This certificate is also designed to provide students who are pursuing careers in the correctional field, the opportunity to broaden their technical knowledge of the many levels of correctional employment opportunities.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:
1. The students will understand state and federal regulations and have knowledge of correctional systems.

REQUIRED CORE COURSES

<table>
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<th>Course</th>
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<td>Concept of Criminal Law</td>
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<td>CRIM 13</td>
<td>The Constitution and Your Individual Rights</td>
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Course Options: Select Any 16 Units

CRIM 1 Introduction to Criminology .................................... 3
CRIM 5 Community Relations ............................................ 3
CRIM 8 Criminal Investigation .......................................... 4
CRIM 11 Juvenile Delinquency ........................................... 3
CRIM 18 Criminal Personalities ........................................ 3
CRIM 23 Correctional Interviewing and Counseling ................. 3
CRIM 24 Control and Supervision in Corrections ................... 3
CRIM 25 Legal Aspects of Corrections ................................ 3

*Ethnic Studies

Hmong Any Level .............................................................. 5

HS 24 Fundamentals of Interviewing and Counseling ................. 3

PSY 2/2H General Psychology, or Honors General Psychology ........ 3

PSY 16 Abnormal Psychology ............................................. 3

Spanish Any Level ............................................................ 4-5

WSTS 10 Changing Roles of Women ....................................... 3

*Choose from AFRAM 1, 2, or 4; AMIND 31, 32, or 34; ASAMER 1 or 15; or CLS 11, 12, 13, 14, 24, 28, 29, or 30.

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and the vice president of Admissions and Records.

CRIMINOLOGY OPTION – MAJOR #7700

A Criminology program designed for upper division work in law enforcement, corrections, or victimology.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Recognize, name and define the key terms necessary for further study in criminology including its sub specializations of law enforcement, corrections, and victimology.
2. Explain the significance and importance of criminology to the society in which they live.
3. Identify the principle discoveries and contributions in the study of criminology and appraise critical areas for further inquiry.
4. Be familiar with a base of knowledge to make educated field level decisions in law enforcement, corrections, or victimology.

REQUIRED CORE COURSES

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<td>CRIM 4</td>
<td>Principles and Procedures of the Justice System</td>
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<td>CRIM 5</td>
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<td>Criminal Justice Communications</td>
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<td>*CRIM 13</td>
<td>The Constitution and Your Individual Rights</td>
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<td>CRIM 15</td>
<td>Introduction to Police Ethics</td>
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Course Options: Select 9 Units

*AFRAM 1 Introduction to African American Studies, or
*AFRAM 4 Classical and Pre Colonial Africa ..................... 3
*AMIND 31 American Indian Culture, or
*AMIND 34 The American Indian in Contemporary Society ........ 3

CRIM 16 Introduction to Victimology ................................ 3

*PSY 2/2H General Psychology, or Honors General Psychology ..... 3

*SOC 1A/1AH Introduction to Sociology, or Honors Introduction to Sociology ................... 3
*SOC 2 American Minority Groups ....................................... 3
*SOC/CLS 14 Sociology of the Mexican American Community, or

*CLS 11 Introduction to Chicano-Latino Studies, or
*ASAMER 15 Introduction to Asian-Americans ........................ 3

*WSTS 10 Changing Roles of Women .................................... 3

* Also fulfills degree or transfer requirements

Note: An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units. The 60-unit minimum must include associate degree requirements and 39 units of course work listed above.
STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

CRIMINOLOGY OPTION – MAJOR #7700
A transfer program designed for upper division work in law enforcement, corrections, or victimology.

CERTIFICATE OF ACHIEVEMENT
Student Learning Outcomes:
1. Recognize, name and define the key terms necessary for employment or for further study in criminology including its sub-fields of law enforcement, corrections, and victimology.
2. Explain the significance and importance of criminology [including law enforcement, corrections, and victimology] to the society in which they live.
3. Identify the principle discoveries and contributions of the study of criminology, and appraise critical areas for further academic inquiry.
4. Make educated field level decisions in law enforcement, corrections, and victimology.

REQUIRED CORE COURSES

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>CRIM 4</td>
<td>Principles and Procedures of the Justice System</td>
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<tr>
<td>CRIM 5</td>
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<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
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<td>CRIM 12</td>
<td>Criminal Justice Communications</td>
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<td>CRIM 13</td>
<td>The Constitution and Your Individual Rights</td>
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Course Options: Select 9 Units

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<td>Afram 4</td>
<td>Classical and Pre Colonial Africa</td>
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<td>Amind 31</td>
<td>American Indian Culture, or</td>
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<td>Amind 34</td>
<td>The American Indian in Contemporary Society</td>
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<tr>
<td>Cls 11</td>
<td>Introduction to Chicano-Latino Studies, or</td>
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<td>Cls/Soc 14</td>
<td>Sociology of the Mexican American Community</td>
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<td>Crim 16</td>
<td>Introduction to Victimology</td>
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<tr>
<td>Psy 2/2h</td>
<td>General Psychology, or</td>
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<td>Soc 1A/1Ah</td>
<td>Introduction to Sociology, or</td>
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<td>Soc 2</td>
<td>American Minority Groups</td>
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<td>Wsts 10</td>
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STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

FORENSIC EVIDENCE OPTION – MAJOR #7732
Designed to provide specialized education for those students desiring a career as crime scene investigators, evidence technicians, or forensic evidence technicians. This degree is also designed to provide those students who are pursuing careers in law enforcement the opportunity to broaden their knowledge and appreciation for the value that forensic evidence plays in the role of solving crime. This degree will also serve as a primer for those students who wish to pursue a higher level of education in forensics at the university level. This Forensic Evidence Degree program has been approved by the International Association for Identification (IAI).

ASSOCIATE IN SCIENCE DEGREE
Student Learning Outcomes:
1. Make an assessment of a crime scene and organize a systematic search for evidence.
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.

REQUIRED CORE COURSES

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<td>Biology for Science Majors I, or</td>
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<td>Cadd 14</td>
<td>2D CAD I</td>
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Course Options: Select 6 Units

BIOL 11B Biology for Science Majors II .................. 5
CRIM 18 Criminal Personalities .............................. 3
PHOTO 5 Introduction to Photography ........................ 3
PSY 2/2H General Psychology, or
Honors General Psychology .................................... 3
PSY 16 Abnormal Psychology ..................................... 3

Note: An associate in science degree will be awarded to any candidate who successfully complete a minimum of 60 units. The 60 units must include associate degree requirements and 39 units of course work listed above.

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

FORENSIC EVIDENCE OPTION – MAJOR #7732

Designed to provide specialized education for those students desiring a career as crime scene investigators, evidence technicians, or forensic evidence technicians. This certificate of achievement is also designed to provide those students who are pursuing careers in law enforcement the opportunity to broaden their knowledge and appreciation for the value that forensic evidence plays in the role of solving crime. This certificate of achievement will also serve as a primer for those students who wish to pursue a higher level of education in forensics at the university level. This Forensic Evidence Certificate of Achievement program is approved by the International Association for Identification (IAI).

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Make an assessment of a crime scene and organize a systematic search for evidence.
2. Collect and process evidence, including analysis and comparison of evidence.
3. Reconstruct a crime scene and prepare evidence for presentation in a judicial proceeding.

REQUIRED CORE COURSES

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<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>CRIM 1</td>
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<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
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<td>CRIM 15</td>
<td>Introduction to Police Ethics</td>
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Total 22

STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:
Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

LAW ENFORCEMENT OPTION – MAJOR #8872

This degree is designed for students considering careers as police officers, sheriff's deputies, or highway patrol officers.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Describe the development and history of law enforcement in the western world.
2. Compare and contrast legal and constitutional issues.
3. Compare and contrast components of the American criminal justice system.

REQUIRED CORE COURSES

<table>
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Total 22

Course Options: Select 9 Units

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<td>American Indian Culture, or</td>
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<td>*AMIND 34</td>
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<td>*CLS 11</td>
<td>Introduction to Chicano-Latino Studies, or</td>
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<td>*SOC/CLS 14</td>
<td>Sociology of the Mexican American Community</td>
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<td>CRIM 3</td>
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**LAW ENFORCEMENT OPTION – MAJOR #8872**

This certificate of achievement is designed for students considering careers as police officers, sheriff's deputies, or highway patrol officers.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Describe the development and history of law enforcement in the western world.
2. Compare and contrast legal and constitutional issues.
3. Compare and contrast components of the American criminal justice system.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>Principles and Procedures of the Justice System</td>
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</tr>
<tr>
<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
</tr>
<tr>
<td>CRIM 7</td>
<td>Concepts of Enforcement Services</td>
</tr>
<tr>
<td>CRIM 8</td>
<td>Criminal Investigation</td>
</tr>
<tr>
<td>CRIM 12</td>
<td>Criminal Justice Communications</td>
</tr>
<tr>
<td>CRIM 15</td>
<td>Introduction to Police Ethics</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
</tr>
</tbody>
</table>

**Course Options:** Select 9 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>Introduction to African American Studies, or Introduction to African American Studies</td>
</tr>
<tr>
<td>AFRAM 4</td>
<td>Classical and Pre Colonial Africa</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture, or American Indian Culture</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>The American Indian in Contemporary Society</td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies, or Introduction to Chicano-Latino Studies</td>
</tr>
<tr>
<td>SOC/CLS 14</td>
<td>Sociology of the Mexican American Community</td>
</tr>
<tr>
<td>CRIM 3</td>
<td>Legal Aspects of Evidence</td>
</tr>
<tr>
<td>CRIM 11</td>
<td>Juvenile Delinquency</td>
</tr>
<tr>
<td>CRIM 13</td>
<td>The Constitution and Your Individual Rights</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>General Psychology, or General Psychology</td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td>Introduction to Sociology, or Introduction to Sociology</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Minority Groups</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
</tr>
</tbody>
</table>

*Also fulfills degree or transfer requirements

**STUDENTS TRANSFERRING FROM THE POLICE ACADEMY:**

Candidates who have completed the Basic Academy or the Reserve Level 1 program may request to waive 6 units from the following courses in the Criminology degree program: Criminology 1, 6, 7, 12. To process this, candidates must complete a course waiver form and attach a copy of the Certificate from the Police Academy or a copy of their transcript. Forms are available in the Social Sciences Division office. The waiver form is then signed by the dean of Social Science and by the vice president of Admissions and Records.

**PRE-ACADEMY TRAINING OPTION – MAJOR #8923**

Non-affiliated students who intend to undertake training through the Police Academy can enhance their chances of success by taking the Pre-Academy Certificate of Achievement program listed below.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcome:**

1. The student will have the fundamental knowledge of related subjects matters taught at a POST Police Academy.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 3</td>
<td>Legal Aspects of Evidence</td>
</tr>
<tr>
<td>CRIM 4</td>
<td>Principles and Procedures of the Justice System</td>
</tr>
<tr>
<td>CRIM 5</td>
<td>Community Relations</td>
</tr>
<tr>
<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
</tr>
<tr>
<td>CRIM 7</td>
<td>Concepts of Enforcement Services</td>
</tr>
<tr>
<td>CRIM 8</td>
<td>Criminal Investigating</td>
</tr>
<tr>
<td>CRIM 12</td>
<td>Criminal Justice Communications</td>
</tr>
<tr>
<td>CRIM 13</td>
<td>The Constitution and Your Individual Rights</td>
</tr>
<tr>
<td>CRIM 15</td>
<td>Introduction to Police Ethics</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>Honors Reading and Composition</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26</td>
</tr>
</tbody>
</table>

**Note:** This certificate of achievement program is strongly recommended. However, it is not a prerequisite for admission to the Police Academy.

For more information on the Police Academy, call 442-8264.
CULINARY ARTS

BASIC CULINARY ARTS – MAJOR #5684

This certificate is designed to prepare students for entry level employment (prep cook, fry cook, line cook) in the field of food service.

CERTIFICATE

Student Learning Outcomes:
1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Demonstrate proper meal service and plate presentation.
3. Identify and compare preparation methods to optimize nutrition content.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 1</td>
<td>3</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
<tr>
<td>FSM 144</td>
<td>2</td>
</tr>
<tr>
<td>FSM 146</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8.5</strong></td>
</tr>
</tbody>
</table>

INTERMEDIATE CULINARY ARTS – MAJOR #5685

This certificate is designed to prepare students for entry level food service employment (prep cook, fry cook, line cook) in health care facilities such as hospitals and long term health care.

CERTIFICATE

Student Learning Outcomes:
1. Demonstrate quality food preparation techniques.
2. Evaluate the nutritional content of foods and menus.
3. Use mathematical formulas to manage cost control in food service delivery.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 35</td>
<td>3</td>
</tr>
<tr>
<td>FSM 38</td>
<td>3</td>
</tr>
<tr>
<td>FSM 147</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7.5</strong></td>
</tr>
</tbody>
</table>

ADVANCED CULINARY ARTS – MAJOR #5686

This certificate is designed to prepare students for entry level management positions in food service.

CERTIFICATE

Student Learning Outcomes:
1. Use specification standards to purchase food and nonfood items.
2. Apply different management theories and styles of leadership in the management of a food service establishment.
3. Prepare a multi-course meal demonstrating proper knife skills, food safety, and proper cooking techniques.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 2 Advanced Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>FSM 11 Food Service Supervision</td>
<td>2</td>
</tr>
<tr>
<td>FSM 15 Food Production Management</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19 Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>FSM 25 Food &amp; Beverage Purchase &amp; Control</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

DANCE – MAJOR #5390

The associate degree in dance provides a base of training in dance technique and practical experience in concert performance and production work as well as theoretical background in dance composition. Possible careers include choreographer, dance director, dance historian, dancer, dance teacher, dance therapist, fitness/aerobic instructor, movement notator, performer, reconstructor, and recreation leader.

Students considering transferring to a four-year institute as a dance major should contact that target institution for dance audition requirements.

Bachelor degree or higher required.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Perform dance in a public setting.
2. Describe characteristic elements and form of various dance and choreographic styles.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANCE 10B Pre-Intermediate Modern Dance, or</td>
<td></td>
</tr>
<tr>
<td>DANCE 12B Beginning Ballet Part 2, or</td>
<td></td>
</tr>
<tr>
<td>DANCE 13A Intermediate Ballet Technique</td>
<td>1-1.5</td>
</tr>
<tr>
<td>DANCE 20A Beginning Modern Dance Composition</td>
<td>3</td>
</tr>
<tr>
<td>DANCE 28 Intermediate Modern Dance Technique</td>
<td>1.5</td>
</tr>
<tr>
<td>DANCE 30 Dance Appreciation</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8.5-9</strong></td>
</tr>
</tbody>
</table>

Select two of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANCE 21 Dance Workshop Performance</td>
<td>2-4</td>
</tr>
<tr>
<td>DANCE 22 Dance Theatre Performance</td>
<td>2-4</td>
</tr>
<tr>
<td>DANCE 31 Dance Workshop Performance 2</td>
<td>2-4</td>
</tr>
<tr>
<td>DANCE 32 Dance Theatre Performance 2</td>
<td>2-4</td>
</tr>
</tbody>
</table>

Select at least six units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANCE 9 Dance Conditioning</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 13A Intermediate Ballet Technique</td>
<td>1.5</td>
</tr>
<tr>
<td>DANCE 13B Pre-Advanced Ballet Technique</td>
<td>1.5</td>
</tr>
<tr>
<td>DANCE 14 Beginning Jazz Dance Technique</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 15 Intermediate Jazz Dance Technique</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 16 Beginning Tap Dance</td>
<td>0.5</td>
</tr>
<tr>
<td>DANCE 17A Beginning Mexican Folk Dance</td>
<td>3.5</td>
</tr>
<tr>
<td>DANCE 18 Intermediate Tap Dance</td>
<td>0.5</td>
</tr>
<tr>
<td>DANCE 20B Intermediate Modern Dance Composition</td>
<td>3</td>
</tr>
</tbody>
</table>
DENTAL HYGIENE – MAJOR #4580

The Registered Dental Hygienist (RDH) provides dental health education, promotes and encourages the preventive aspects of dental care, administers local anesthesia, delivers nitrous oxide/oxygen analgesia, exposes and processes dental x-rays, performs oral cancer screenings, removes deposits and stains from teeth, performs gingival soft tissue management (curettage), and generally assumes responsibilities for dental hygiene patient care in the dental office.

Completion of the Dental Hygiene Program leads to an Associate in Science degree. After completing the program and passing the National Board examination, graduates are eligible to apply for and take the California State Board and/or other clinical examinations for licensing Registered Dental Hygienists.

Dental hygiene students will be required, as part of the total dental hygiene program, to participate in service learning activities. These activities could include community dental health projects, hospital clinical practice, and other field excursions of educational value.

Application Requirements

Enrollment is limited in the dental hygiene program. Minimum qualifications for selection must be met. There are no restrictions as to age, race, gender, or marital status. Minimum prerequisite requirements for application to the program are the following:

1. Have graduated from high school or have an average score of 45 on the General Educational Development (GED) test.
2. Have a minimum cumulative college grade point average (GPA) of 2.70.
3. Have completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, (or equivalent), or Biology 21A and Biology 21B (or equivalent) each with a grade of “C” or better.
4. Have completed English 1A, Reading and Comprehension; Math 103, Foundations of Algebra, or another more advanced math course; Chemistry 3A, Introduction to General Chemistry; Chemistry 3B, Organic and Biological Chemistry; Biology 31, Microbiology; Food and Nutrition 40, Nutrition; Communication 1 or 2, Introduction to Speaking or Interpersonal Communication; Psychology 2, General Psychology; and Sociology 1A, Introduction to Sociology (or equivalents to these courses) with grades of “C” or better.
5. Have completed an Academic Summary Form for the Dental Hygiene Program.
6. Have no physical impairment that would preclude the performance of all dental hygiene duties.
7. Be in good physical and mental health.

ACADEMIC REQUIREMENTS

All program entry requirement courses listed above must be completed with a grade of “C” or better. In order to be eligible to take the California State Dental Hygiene Board examination, all other courses leading to the associate degree must also be completed with a grade of “C” or better.

Students in the dental hygiene program must earn a “C” grade or better (or a “Credit” grade when applicable) in all dental hygiene courses. Less than a “C” or a “Credit” grade in any dental hygiene course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily, based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

BACKGROUND CHECK

Upon entry into the program, students may be required to obtain a background check.

CHANGE OF NAME, ADDRESS, AND/OR TELEPHONE NUMBER

Applicants and dental hygiene students must keep the Dental Hygiene Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Dental Hygiene Office of this vital information may result in loss of entry into the program. Dental hygiene students must have working e-mail addresses.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Complete the National Board Dental Hygiene Examination with a score of 75th percentile or better.
2. Pass clinical licensing examinations.

FIRST YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 1A</td>
<td>Oral Biology .................................. 2</td>
</tr>
<tr>
<td>DH 3A</td>
<td>Preclinical Dental Hygiene Tech .............. 4</td>
</tr>
<tr>
<td>DH 4</td>
<td>Oral Radiography ................................ 4</td>
</tr>
<tr>
<td>DH 10</td>
<td>Head &amp; Neck Anatomy ........................... 2</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 1B</td>
<td>General and Oral Pathology .................. 4</td>
</tr>
<tr>
<td>DH 2</td>
<td>Dental Materials ................................ 2</td>
</tr>
<tr>
<td>DH 5A</td>
<td>Clinical Dental Hygiene I .................... 2.5</td>
</tr>
<tr>
<td>DH 6A</td>
<td>Medical Emergencies in the Dental Office .... 1</td>
</tr>
<tr>
<td>DH 8A</td>
<td>Patient Management ........................... 2</td>
</tr>
<tr>
<td>DH 11</td>
<td>Local Anesthesia ............................... 2.5</td>
</tr>
<tr>
<td>DH 12</td>
<td>Clinical Seminar Topics I ................... 1</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
</tr>
</tbody>
</table>
SECOND YEAR

First Semester
DH 1C Periodontology.................................2
DH 5B Clinical Dental Hygiene II ......................5
DH 6B Pharmacology ................................3
DH 7A Community Dental Health I ..................2
DH 13 Seminar Topics II, Advanced Instrumentation....1
Total 13

Second Semester
DH 1D Applied Periodontics........................1
DH 3B Dental Specialties .............................1
DH 5C Clinical Dental Hygiene III ....................5
DH 7B Community Dental Health II ..................1
DH 8B Practice & Financial Management .............2
DH 9 Nutrition in Dentistry ...........................1
DH 14 Clinical Seminar Topics III ....................1
Total 12

Note: All application requirements, program requirements and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College health career counselor every semester for current information.

DEVELOPMENTAL SERVICES

ADAPTIVE ORNAMENTAL HORTICULTURE SKILLS – MAJOR #1060

The adaptive ornamental horticulture skills program is designed to provide students with disabilities with both educational and vocational opportunities. A certificate will not only validate participation in the program, but it will also enhance the opportunities to secure gainful employment.

CERTIFICATE

Student Learning Outcomes:
1. Discuss potential employment opportunities based on their educational and horticultural skills.

FIRST YEAR

First Semester
DEVSER 262 Group Interaction for Students with Disabilities .................................................2
DEVSER 275 Horticulture Skills I .................................................................2
Total 4

Second Semester
DEVSER 262 Group Interaction for Students with Disabilities .................................................2
DEVSER 276 Horticulture Skills II .................................................................2
Total 4

SCHOOL TO WORK, CLERICAL – MAJOR #7004

The School to Work Clerical Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage awareness in the clerical workforce as well as prepare students for mainstream computer classes. This certificate will validate the students' participation in the School to Work objectives at Fresno City College and enhances computer/clerical awareness of each student.

CERTIFICATE

Student Learning Outcomes:
1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate basic computer literacy skills.

Select a minimum of 16 units from the following list:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVSER 262</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 272</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 273</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 277</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 278</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 279</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 291</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL 15

HIGH TECH ADAPTIVE PROGRAM – MAJOR #7006

High Tech Computer certificate program is designed to provide students with the educational and vocational opportunities and will also enhance prospects for gainful employment by developing computer skills using Adaptive Technology.

CERTIFICATE

Student Learning Outcomes:

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVSER 262 Group Interaction for Students with Disabilities</td>
<td>2</td>
</tr>
<tr>
<td>DEVSE 277 Adapted Computer Literacy</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 278 Modified Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 279 Modified Computer Applications</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 277 Reading Skills</td>
<td>2.5</td>
</tr>
<tr>
<td>ENGL 281 Grammar and Sentence Writing</td>
<td>2.5</td>
</tr>
<tr>
<td>MATH 277 Arithmetic for the Learning Disabled</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL 15
The Certificate requires completion of 16 units within major with a 2.0/Pass or better GPA. Certificates do not appear on the transcript.

SCHOOL TO WORK, WORKABILITY – MAJOR #7005

The School to Work Workability Certificate Program is designed to provide students with the opportunity to enhance their education while focusing on an environment which will encourage job awareness. This certificate will validate the students’ participation in the School to Work objectives of Fresno City College and enhance employment of each student.

CERTIFICATE

Student Learning Outcomes:
1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate time management and organizational skills.

Select a minimum of 16 units from the following list: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVSER 250</td>
<td>Workability Assess and Career Awareness</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 251</td>
<td>Workability Portfolio and Interview Development</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 252</td>
<td>Workability Strategies and Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 260</td>
<td>Workability Job Search</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 262</td>
<td>Group Interaction for Students with Disabilities</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 264</td>
<td>Transition to College for Student w/Disabilities</td>
<td>1</td>
</tr>
<tr>
<td>DEVSER 272</td>
<td>Consumer Skills</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 273</td>
<td>Independent Living Skills</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 275</td>
<td>Horticultural Skills I</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 276</td>
<td>Horticulture Skills II</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 277</td>
<td>Adapted Computer Literacy</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 278</td>
<td>Modified Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 279</td>
<td>Modified Computer Applications</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 282</td>
<td>Greenhouse Workforce Prep</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 291</td>
<td>Strategies for Academic Success</td>
<td>2</td>
</tr>
<tr>
<td>DEVSER 292</td>
<td>College Awareness Survival Skills</td>
<td>2</td>
</tr>
</tbody>
</table>

The Certificate requires completion of 16 units within major with a 2.0/Pass or better GPA. Certificates do not appear on the transcript.

ECONOMICS FOR TRANSFER – MAJOR #2020

The Associate in Arts in Economics for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. This degree will acquaint students with the fundamentals of economic thinking and the principle concepts and theories of macroeconomics and microeconomics. Additionally, the degree will offer students the math and statistics preparation required for upper division coursework in economics. To earn the Associate in Arts in Economics for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Understand and apply basic economic methodology to describe, analyze and explain human behavior and societal challenges.
2. Apply principle microeconomic and macroeconomic concepts, theories and models to describe, analyze and explain relevant economic issues

REQUIRED COURSES Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Honors Introduction to Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Honors Introduction to Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>MATH 5A</td>
<td>Elementary Statistics</td>
<td>5</td>
</tr>
<tr>
<td>MATH 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
<td></td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics, or</td>
<td></td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td>3-4</td>
</tr>
</tbody>
</table>
Choose two of the following courses:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 4B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 5B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 6</td>
<td>4</td>
</tr>
<tr>
<td>MATH 21</td>
<td>3</td>
</tr>
<tr>
<td>MATH 26</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 20-23

**EDUCATION**

The Associate in Arts in Elementary Teacher Education for Transfer Degree is designed for students planning to transfer to a four-year university ready to continue for a bachelor's degree in Liberal Studies and a preliminary Multiple Subject Elementary Teaching Credential. To earn the Associate in Arts in Elementary Education for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. California teaching credential requirements are subject to change; consult with a counselor each semester to ensure compliance with state regulations and transfer requirements.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**
1. Demonstrate introductory subject matter competency required for the teaching at the elementary school level.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for teaching at the elementary school level.
3. Discuss historical influence and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.

**PROGRAM REQUIREMENTS**

**REQUIRED 47 UNITS OF CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3</td>
<td>4</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>3</td>
</tr>
</tbody>
</table>

**EDUCATION**

**Transfer – Major #5920**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1</td>
<td></td>
</tr>
<tr>
<td>EDUC 19</td>
<td></td>
</tr>
<tr>
<td>EDUC 30</td>
<td></td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td></td>
</tr>
<tr>
<td>ENGL 1B</td>
<td></td>
</tr>
<tr>
<td>ENGL 4A</td>
<td></td>
</tr>
<tr>
<td>ENGL 4B</td>
<td></td>
</tr>
<tr>
<td>GEOL 9</td>
<td></td>
</tr>
<tr>
<td>HIST 11</td>
<td></td>
</tr>
<tr>
<td>HIST 20</td>
<td></td>
</tr>
<tr>
<td>MATH 10A</td>
<td></td>
</tr>
<tr>
<td>MATH 26</td>
<td></td>
</tr>
<tr>
<td>MATH 6</td>
<td></td>
</tr>
<tr>
<td>MATH 21</td>
<td></td>
</tr>
<tr>
<td>MATH 26</td>
<td></td>
</tr>
</tbody>
</table>

**LIST A:** Select 1 course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 3/3H</td>
<td></td>
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<tr>
<td>PHIL 2</td>
<td></td>
</tr>
</tbody>
</table>

**LIST B:** Select 1 course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2</td>
<td></td>
</tr>
<tr>
<td>ART 5/5H</td>
<td></td>
</tr>
<tr>
<td>ART 6/6H</td>
<td></td>
</tr>
<tr>
<td>MUS 12</td>
<td></td>
</tr>
<tr>
<td>TA 30</td>
<td></td>
</tr>
</tbody>
</table>

**LIST C:** Select 2 courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 7</td>
<td></td>
</tr>
<tr>
<td>ART 9</td>
<td></td>
</tr>
<tr>
<td>ART 10</td>
<td></td>
</tr>
<tr>
<td>ART 11</td>
<td></td>
</tr>
<tr>
<td>CHDEV 38</td>
<td></td>
</tr>
<tr>
<td>CIT 12</td>
<td></td>
</tr>
<tr>
<td>CIT 15</td>
<td></td>
</tr>
<tr>
<td>GEOG 2</td>
<td></td>
</tr>
<tr>
<td>HIST 1/1H</td>
<td></td>
</tr>
<tr>
<td>HIST 12/12H</td>
<td></td>
</tr>
<tr>
<td>LING 11</td>
<td></td>
</tr>
<tr>
<td>MATH 10B</td>
<td></td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td></td>
</tr>
<tr>
<td>WSTS 10</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Critical Reading & Writing, or Honors Critical Reading & Writing
- Critical Reasoning and Analytic Writing
- Honors Art History Ancient to Medieval
- Honors Art History Renaissance to Modern
- Honors Western Civilization to 1648
- Honors History of the United States since 1877
- Honors Introduction to Sociology
- Fundamentals of Oral Interpretation
- Beginning Acting
EDUCATION PARAPROFESSIONAL - FORMERLY TEACHER AIDE: GENERAL – MAJOR #5911

The Education Paraprofessional Certificate of Achievement prepares students to work as paraprofessionals in kindergarten through grade 12 (K-12) school settings. Completing the certificate satisfies the federal No Child Left Behind requirements for employment in a school district and is the foundation for the Associate degree for Transfer in Elementary Education.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate introductory subject matter competency required for working in the K-12 setting.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for working in the K-12 setting.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.

PROGRAM REQUIREMENTS

Required 49 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2</td>
<td></td>
</tr>
<tr>
<td>MUS 12</td>
<td>3</td>
</tr>
<tr>
<td>MUS 10</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 3</td>
<td>4</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 38</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>3</td>
</tr>
<tr>
<td>CIT 15</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 19</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 30</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 125</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 4A</td>
<td></td>
</tr>
<tr>
<td>GEOG 4B</td>
<td>3</td>
</tr>
<tr>
<td>HIST 11</td>
<td>3</td>
</tr>
<tr>
<td>LING 11</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 49 units

Notes: No Child Left Behind legislation requires paraprofessionals to complete 48 units of college coursework or to pass an employer-administered exam.

SPECIAL EDUCATION ASSISTANT – MAJOR #5982

The Special Education Assistant Certificate of Achievement prepares students to work as paraprofessionals in special education classrooms in kindergarten through grade 12 (K-12) school settings. This Certificate is the foundation for the Special Education Paraprofessional Certificate and the Associate degree for Transfer in Elementary Education.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate introductory subject matter competency required for working in special education classrooms in kindergarten to grade 12 settings.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for working in special education classrooms in kindergarten to grade 12.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 6</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 7</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 19</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 125</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 16 units

SPECIAL EDUCATION PARAPROFESSIONAL – MAJOR #5913

The Special Education Paraprofessional Certificate of Achievement prepares students to work as paraprofessionals in special education classrooms in kindergarten through grade 12 (K-12) school settings. Completing the certificate satisfies the federal No Child Left Behind requirements for employment in a school district and is the foundation for the Associate degree for Transfer in Elementary Education.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate introductory subject matter competency required for working in special education classrooms in kindergarten to grade 12 settings.
2. Demonstrate knowledge of social, cultural, environmental, and aesthetic perspectives necessary for working in special education classrooms in kindergarten to grade 12.
3. Discuss historical influences and current trends in education, as well as teaching strategies and approaches appropriate for students of diverse, needs, abilities and backgrounds.
PROGRAM REQUIREMENTS

Required 49 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3</td>
<td>Introduction to Life Science</td>
<td>4</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 38</td>
<td>Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 6</td>
<td>Introduction to Special Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 7</td>
<td>Exceptional Learners</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 19</td>
<td>Work Experience (Cooperative)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Occupational</td>
<td>2</td>
</tr>
<tr>
<td>EDUC 30</td>
<td>Survey of American Education</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 125</td>
<td>Writing Skills for College</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 4A/4B</td>
<td>World Geography</td>
<td>3</td>
</tr>
<tr>
<td>HIST 11</td>
<td>History of the United States to 1877</td>
<td>3</td>
</tr>
<tr>
<td>LING 11</td>
<td>Introduction to Language for Educators</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201</td>
<td>Elementary Algebra</td>
<td>5</td>
</tr>
</tbody>
</table>

Select a minimum of thirty-eight (38) additional units from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 50</td>
<td>Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EST 55A</td>
<td>Digital Concepts</td>
<td>3</td>
</tr>
<tr>
<td>EST 55B</td>
<td>Facility Automation</td>
<td>3</td>
</tr>
<tr>
<td>EST 55C</td>
<td>SCADA Systems</td>
<td>2</td>
</tr>
<tr>
<td>EST 56A</td>
<td>Wiring Methods</td>
<td>3</td>
</tr>
<tr>
<td>EST 56B</td>
<td>Motor Controls</td>
<td>3</td>
</tr>
<tr>
<td>EST 56C</td>
<td>Industrial Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EST 57A</td>
<td>Analog Communications</td>
<td>3</td>
</tr>
<tr>
<td>EST 57B</td>
<td>Digital Communications</td>
<td>3</td>
</tr>
<tr>
<td>EST 57C</td>
<td>Voice and Data Cabling</td>
<td>3</td>
</tr>
<tr>
<td>EST 58</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>EST 59</td>
<td>Instrumentation Systems</td>
<td>3</td>
</tr>
<tr>
<td>EST 60</td>
<td>A+ PC Maintenance and Repair</td>
<td>3</td>
</tr>
<tr>
<td>EST 80</td>
<td>Introduction to Photovoltaics</td>
<td>3</td>
</tr>
<tr>
<td>EST 81</td>
<td>Photovoltaic Systems</td>
<td>3</td>
</tr>
<tr>
<td>EST 82A</td>
<td>Introduction to Robotics</td>
<td>3.5</td>
</tr>
<tr>
<td>EST 82B</td>
<td>Robotic Applications</td>
<td>3.5</td>
</tr>
</tbody>
</table>

No more than three (3) units of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 96A</td>
<td>National Electrical Code Part 1</td>
<td>3</td>
</tr>
<tr>
<td>EST 96B</td>
<td>National Electrical Code Part 2</td>
<td>3</td>
</tr>
<tr>
<td>EST 96C</td>
<td>National Electrical Code Part 3</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTRICAL SYSTEMS TECHNOLOGY
- FORMERLY ELECTRONIC TECHNOLOGY – MAJOR #8171

Electrical Systems Technology provides an opportunity for students to prepare for employment in the electronics/electrical industry. Specific occupational preparation is provided in the following program.

ASSOCIATE IN SCIENCE DEGREE AND
CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Define and apply various numbering systems (i.e. Binary, hexadecimal and Octal).
2. Develop a motor logic control solution using the defined parameters given.
3. Demonstrate a comprehension of the basic operation of communication systems for digital signals.
4. Design and configure a control application using a PLC and PLC software.
5. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AT 40</td>
<td>Preparing for Employment Opportunities</td>
<td>3</td>
</tr>
<tr>
<td>EST 51</td>
<td>Direct Current Fund of Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EST 52</td>
<td>Alternating Current Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 53</td>
<td>Lab Safety Practices</td>
<td>2</td>
</tr>
<tr>
<td>EST 54</td>
<td>Integrated Devices</td>
<td>3</td>
</tr>
<tr>
<td>EST 96D</td>
<td>National Electrical Code-Electrical Safety</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 20

ADVANCED PHOTOVOLTAIC TECHNICIAN
- MAJOR #6186

The courses in the advanced photovoltaic technician certificate prepare the student for employment in the photovoltaic industry for auditors, site surveyors, designers, and other advanced positions.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Given a customer's electrical usage, plan, design, document, and install various photovoltaic systems with all required hardware and electrical equipment to NEC and local/state requirements.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 51</td>
<td>Direct Current Fund of Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EST 52</td>
<td>Alternating Current Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 53</td>
<td>Lab Safety Practices</td>
<td>2</td>
</tr>
<tr>
<td>EST 54</td>
<td>Integrated Devices</td>
<td>3</td>
</tr>
<tr>
<td>EST 56A</td>
<td>Wiring Methods</td>
<td>3</td>
</tr>
<tr>
<td>EST 81</td>
<td>Photovoltaic Systems</td>
<td>3</td>
</tr>
<tr>
<td>EST 96D</td>
<td>National Electrical Code-Electrical Safety</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 20
### BIOMEDICAL TECH – MAJOR #6085

The biomedical technology program trains students to troubleshoot and repair electronics based biomedical instruments and equipment. Course topics highlight three (3) primary fields of study: Electronic Fundamentals, Human Anatomy and biomedical instrumentation. Students study electronics at the component level and human biological processes as building blocks for understanding biomedical instrumentation function, operation and troubleshooting.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Distinguish and list various medical imaging technologies.
2. Set up standard electrical measurement tools and differentiate the uses for calibration and troubleshooting of medical equipment.
3. Categorize biopotentials and electrodes as they relate to basic human anatomy and physiology systems.
4. Associate the applicable regulation with the regulating organizations.
5. Evaluate the data from basic preventive maintenance tests on the following equipment: multi-parameter physiological monitor, electrocardiogram (ECG) machine, blood pressure monitor, defibrillator, pulse oximeter, infusion pump, and electrosurgical unit.

<table>
<thead>
<tr>
<th>FIRST YEAR - First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td></td>
</tr>
<tr>
<td>EST 51</td>
<td>3</td>
</tr>
<tr>
<td>EST 53</td>
<td>2</td>
</tr>
<tr>
<td>EST 55A</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIRST YEAR - Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 52</td>
<td>3</td>
</tr>
<tr>
<td>EST 57A</td>
<td>3</td>
</tr>
<tr>
<td>EST 60</td>
<td>3</td>
</tr>
<tr>
<td>EST 61</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND YEAR - First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 54</td>
<td>3</td>
</tr>
<tr>
<td>EST 57B</td>
<td>3</td>
</tr>
<tr>
<td>EST 57C</td>
<td>3</td>
</tr>
<tr>
<td>EST 82A</td>
<td>3.5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND YEAR - Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 40</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5</td>
<td>4</td>
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<tr>
<td>EST 84A</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

### FACILITY CONTROLS - FORMERLY FACILITY CONTROL TECHNICIAN AND AUTOMATION CONTROL TECHNICIAN – MAJOR #8189

Training is designed to prepare the student for employment as a building automation technician.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Develop and implement a strategy utilizing HVAC controls.
2. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
3. Design and implement a security strategy utilizing door access controls.

**ELECTRICITY FUNDAMENTALS 2 CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 51 Direct Current Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 52 Alternating Current Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 53 Lab Safety Practices</td>
<td>2</td>
</tr>
<tr>
<td>EST 54 Integrated Devices</td>
<td>3</td>
</tr>
<tr>
<td>EST 56A Wiring Methods</td>
<td>3</td>
</tr>
<tr>
<td>EST 96A National Electrical Code Part 1, or</td>
<td>3</td>
</tr>
<tr>
<td>EST 96B National Electrical Code Part 2, or</td>
<td>3</td>
</tr>
<tr>
<td>EST 96C National Electrical Code Part 3</td>
<td>3</td>
</tr>
<tr>
<td>EST 96D National Electrical Code-Electrical Safety</td>
<td>3</td>
</tr>
</tbody>
</table>

**FACILITY CONTROLS REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 55A Digital Concepts</td>
<td>3</td>
</tr>
<tr>
<td>EST 55B Facility Automation</td>
<td>3</td>
</tr>
<tr>
<td>EST 57C Voice and Data Cabling</td>
<td>3</td>
</tr>
<tr>
<td>EST 59 Instrumentation Systems</td>
<td>3</td>
</tr>
<tr>
<td>HVAC 57 HVAC Digital Control Principles</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 150 Wireless HVAC Controls</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

### CISCO CCNA PREPARATION - MAJOR #8174

This option is to prepare students for the CISCO Certified Entry Networking Technician (CCENT) and/or CISCO Certified Network Associate (CCNA) and the CompTIA Net+ certification exams.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for either static and/or dynamic IP routing for a given scenario.
3. Configure a switch for implementing the VLAN protocols.
4. Construct a WAN network utilizing the requested protocol over multiple routers and WAN service providers.
REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 61</td>
<td>Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 62</td>
<td>Routing &amp; Switching Essentials</td>
<td>3</td>
</tr>
<tr>
<td>EST 63</td>
<td>Scaling Networks</td>
<td>3</td>
</tr>
<tr>
<td>EST 64</td>
<td>Advanced Networking and Management</td>
<td>3</td>
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<tr>
<td></td>
<td>And the following courses in any sequence:</td>
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</tr>
<tr>
<td>EST 57C</td>
<td>Voice and Data Cabling</td>
<td>3</td>
</tr>
<tr>
<td>EST 60</td>
<td>A+ PC Maintenance and Repair</td>
<td>3</td>
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</table>

LOW VOLTAGE - FORMERLY COMMUNICATION TECHNICIAN AND COMMUNICATION TECHNOLOGY - MAJOR #8187

Training is designed to prepare the student for employment as a communication technician.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Design and implement various communication strategies that use radios to allow industrial controllers to communicate and share data.
2. Construct and analyze electronic circuits relating to digital to analog converters, analog to digital converters and time division multiplexing.
3. Design and implement a network topology for a solution to a proposed communication problem.

ELECTRICITY FUNDAMENTALS 2 CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>EST 51</td>
<td>Direct Current Fundamentals of Electronics</td>
<td>3</td>
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<td>EST 52</td>
<td>Alternating Current Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 53</td>
<td>Lab Safety Practices</td>
<td>2</td>
</tr>
<tr>
<td>EST 54</td>
<td>Integrated Devices</td>
<td>3</td>
</tr>
<tr>
<td>EST 56A</td>
<td>Wiring Methods</td>
<td>3</td>
</tr>
<tr>
<td>EST 96A</td>
<td>National Electrical Code Part 1, or</td>
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<tr>
<td>EST 96B</td>
<td>National Electrical Code Part 2, or</td>
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</tr>
<tr>
<td>EST 96C</td>
<td>National Electrical Code Part 3</td>
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<tr>
<td>EST 96D</td>
<td>National Electrical Code-Electrical Safety</td>
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</table>

INTRODUCTION TO INDUSTRIAL CONTROLS - MAJOR #8185

This option is to prepare students for the Industrial Controls Certificate. By completing this option, a student will have the training that emphasizes industrial control systems.

CERTIFICATE

Student Learning Outcomes:
1. Define and apply digital numbering systems (i.e. Binary, Hexadecimal and Octal).
2. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.
3. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
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<td>EST 50</td>
<td>Introduction to Electronics, or</td>
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<td>MMCTC 372</td>
<td>Electrical Fundamentals</td>
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<tr>
<td>EST 55A</td>
<td>Digital Concepts</td>
<td>3</td>
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<tr>
<td>EST 56B</td>
<td>Motor Controls</td>
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<tr>
<td>EST 58</td>
<td>Programmable Logic Controllers</td>
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<td>EST 59</td>
<td>Instrumentation Systems</td>
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</table>
### NETWORKING/COMPUTER TECHNICIAN

**MAJOR #8172**

This option is designed to meet the training needs for qualified entry-level microcomputer and networking technicians.

#### ASSOCIATE IN SCIENCE DEGREE

**Student Learning Outcomes:**

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

#### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>*BT 23</td>
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<tr>
<td>BT 112</td>
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<td>CIT 15</td>
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<td>**CIT 45</td>
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<td>EST/CIT 19</td>
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<td>EST 55A</td>
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<td>EST 60</td>
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**SUGGESTED SEQUENCE OF COURSES:**

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<table>
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<td><strong>Total</strong></td>
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### NETWORKING/COMPUTER TECHNICIAN

**MAJOR #8172**

This option is designed to meet the training needs for qualified entry-level microcomputer and networking technicians.

#### CERTIFICATE OF ACHIEVEMENT

**Student Learning Outcomes:**

1. Construct and apply an IP addressing scheme for a simple network problem.
2. Configure a router for communication on both Ethernet and serial ports with given instructions or scenarios.
3. Define and apply digital numbering systems.
4. Explain how networks are interconnected and understand how operating system software affects the hardware.
5. Install and configure the network server operating system software, and manage servers, users, and resources with a server manager utility, and monitor network system performance.

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<table>
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<td><strong>Total</strong></td>
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</tbody>
</table>

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* AT 40 can be substituted for BT 23.

** EST 57A and EST 57B may be substituted for CIT 45.

Note: Associate degree requirements are listed on page 35.
ENGINEERING

ENGINEERING: CIVIL – MAJOR #3011

This degree program is designed as basic coursework necessary for pursuing a career in the field of civil engineering. Students will be prepared for engineering internship opportunities and transferring into four-year engineering programs.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
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<tr>
<td>ENGR 5</td>
<td>Programming and Problem Solving in MATLAB</td>
<td>3</td>
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<td>MATH 5B</td>
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<td>MATH 6</td>
<td>Mathematical Analysis III</td>
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<td>Physics for Scientists and Engineers</td>
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<td>PHYS 4B</td>
<td>Physics for Scientists and Engineers</td>
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<td>CHEM 1A</td>
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<tr>
<td>ENGR 2</td>
<td>Graphics</td>
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<tr>
<td>ENGR 4</td>
<td>Engineering Materials</td>
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</tr>
<tr>
<td>ENGR 8</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 7</td>
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<tr>
<td>PHYS 4C</td>
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</table>

Total 40-43

CERTIFICATE OF ACHIEVEMENT

ENGINEERING: COMPUTER, SOFTWARE – MAJOR #3012

This degree program is designed as basic coursework necessary for pursuing a career in the field of computer or software engineering. Students will be prepared for engineering internship opportunities and transferring to four-year engineering programs.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.

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<tr>
<th>Course</th>
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<th>Units</th>
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<tbody>
<tr>
<td>ENGR 5</td>
<td>Programming and Problem Solving in MATLAB</td>
<td>3</td>
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<tr>
<td>ENGR 10</td>
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<tr>
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<td>Physics for Scientists and Engineers</td>
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</table>

Total 40-43
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.

5. An ability to function effectively as a member or leader on a technical team.

REQUIRED CORE COURSES

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<th>Units</th>
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<tbody>
<tr>
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<td>MATH 6</td>
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<tr>
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</tr>
<tr>
<td>PHYS 4B</td>
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</table>

Computer, Software Track:

Select a minimum of 4 courses

<table>
<thead>
<tr>
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Total | 42 |

ENGINEERING: COMPUTER, SOFTWARE

– MAJOR #3012

This certificate of achievement is designed as basic coursework necessary for pursuing a career in the field of computer and software engineering.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.

3. An ability to identify and use appropriate technical literature.

4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.

5. An ability to function effectively as a member or leader on a technical team.

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<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>PHYS 4B</td>
<td>Physics for Scientists and Engineers</td>
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</tbody>
</table>

Engineering: Electrical – Major #3013

This degree program is designed as basic coursework necessary for pursuing a career in the field of electrical engineering. Students will be prepared for engineering internship opportunities and transferring to four-year engineering programs.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.

3. An ability to identify and use appropriate technical literature.

4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.

5. An ability to function effectively as a member or leader on a technical team.

REQUIRED CORE COURSES

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<td>PHYS 4B</td>
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</table>
ENGINEERING: ELECTRICAL – MAJOR #3013

This certificate of achievement is designed as basic coursework necessary for pursuing a career in the field of electrical engineering.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
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<tr>
<td>PHYS 4A</td>
<td>Physics for Scientists and Engineers</td>
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</tr>
<tr>
<td>PHYS 4B</td>
<td>Physics for Scientists and Engineers</td>
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<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CSCI 40</td>
<td>Programming Concepts &amp; Methodology I, or</td>
<td></td>
</tr>
<tr>
<td>MATH 7</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
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<tr>
<td>ENGR 6</td>
<td>Circuits with Lab</td>
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<tr>
<td>ENGR 12</td>
<td>Digital Logic Design</td>
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<td>4</td>
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</tr>
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</table>

ENGINEERING: MECHANICAL, AEROSPACE, AND MANUFACTURING – MAJOR #3014

This degree program is designed as basic coursework necessary for pursuing a career in the field of mechanical, aerospace, or manufacturing engineering. Students will be prepared for engineering internship opportunities and transferring into four-year engineering programs.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.
5. An ability to function effectively as a member or leader on a technical team.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 5</td>
<td>Programming and Problem Solving in MATLAB</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 10</td>
<td>Introduction to Engineering</td>
<td>2</td>
</tr>
<tr>
<td>MATH 5A</td>
<td>Mathematical Analysis I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 5B</td>
<td>Mathematical Analysis II</td>
<td>4</td>
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<td>MATH 6</td>
<td>Mathematical Analysis III</td>
<td>4</td>
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<td>PHYS 4A</td>
<td>Physics for Scientists and Engineers</td>
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</tr>
<tr>
<td>PHYS 4B</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 2</td>
<td>Graphics</td>
<td>4</td>
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<tr>
<td>ENGR 4</td>
<td>Engineering Materials</td>
<td>3</td>
</tr>
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<td>ENGR 6</td>
<td>Circuits with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 8</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 11</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>MATH 7</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4C</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
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<tr>
<td>Total</td>
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<td>39-43</td>
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</table>
ENGINEERING; MECHANICAL, AEROSPACE, AND MANUFACTURING – MAJOR #3014

This certificate of achievement is designed as basic coursework necessary for pursuing a career in the field of mechanical, aerospace, and manufacturing engineering.

CERTIFICATE OF ACHIEVEMENT

**Student Learning Outcomes:**

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.

3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes.

5. An ability to function effectively as a member or leader on a technical team.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 5</td>
<td>Programming and Problem Solving in MATLAB</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 10</td>
<td>Introduction to Engineering</td>
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<tr>
<td>MATH 5A</td>
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**Mechanical, Aerospace, and Manufacturing Track:**

Select a minimum of 4 courses

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<thead>
<tr>
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<tbody>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
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<tr>
<td>ENGR 2</td>
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</tr>
<tr>
<td>ENGR 8</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 11</td>
<td>Manufacturing Processes</td>
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<tr>
<td>MATH 7</td>
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<tr>
<td>PHYS 4C</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
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</table>

Total: 39-43

ENGLISH FOR TRANSFER – MAJOR #5305

The Associate in Arts in English for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A degree in English is considered a rigorous, complementary education for careers in the legal field, editing, interpreting, translation, and teaching at the K-12 and college levels. To earn the Associate in Arts in English for Transfer degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

**Student Learning Outcomes:**

1. Read and critically evaluate college-level material from various sources through analysis and synthesis of information.

2. Write appropriately documented argumentative essays and research papers to deal with the ideas by definition, evaluation, interpretation, and persuasion.

3. Analyze and respond in writing to a variety of literature, including short fiction, poetry, drama, novels, and other genres, concerning thematic, rhetorical, and symbolic elements.

4. Write about and analyze the various literary elements such as plot, characterization, setting, voice, meter and tragedy in selected works.

5. Demonstrate an understanding of the importance of the assigned works to various time periods and cultures, and to literary tradition.

**MAJOR CORE**

English 1A/1AH is a prerequisite to major core courses; it also meets writing/reading competency and general education area D1.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL 1B</td>
<td>Introduction to the Study of Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3</td>
<td>Critical Reading and Writing</td>
<td>3</td>
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</table>

Total: 6
MAJOR COURSE OPTIONS - SECTION A
Select one of the course sequences (6 units total) from the following list:
- ENGL 44A: World Literature to the Renaissance, and
- ENGL 44B: World Literature since the Renaissance, or
- ENGL 46A: English Literature to 1800, and
- ENGL 46B: English Literature from 1800 to the Present, or
- ENGL 48A: Introduction to American Literature to 1865, and
- ENGL 48B: Introduction to American Literature 1865 to the Present

MAJOR COURSE OPTIONS - SECTION B
Select either six (6) from Section B, or three (3) units from Section B and three (3) units from Section C (Courses taken to meet Section A above cannot be used to fulfill Section B):
- ENGL 14: Folklore ........................................... 3
- ENGL 15A: Creative Writing: Poetry .................. 3
- ENGL 15B: Creative Writing: Fiction .................. 3
- ENGL/TA15C: Creative Writing: Playwriting ........ 3
- ENGL/AFRAM 17: African American Literature ....... 3
- ENGL/ASAMER 20: Asian American Literature ....... 3
- ENGL/HUM 42: Classic Myths ............................ 3
- ENGL 44A: World Literature to the Renaissance ..... 3
- ENGL 44B: World Literature since the Renaissance .. 3
- ENGL 45: Contemporary World Literature ........... 3
- ENGL 46A: English Literature to 1800 ................. 3
- ENGL 46B: English Literature from 1800 to the Present ..... 3
- ENGL 48A: Introduction to American Literature to 1865 ........................................... 3
- ENGL 48B: Introduction to American Literature 1865 to the Present ............................... 3
- LING 10: Introduction to Language ..................... 3

SECTION C
Select either six (6) from Section C, or three (3) units from Section C and two (2) units from Section B:
- ENGL 12: The Bible as Literature ....................... 3
- ENGL 15D: Creative Writing: Creative Nonfiction .... 3
- ENGL/WSTS 36: Women's Literature ................. 3
- ENGL 40: Themes in Literature .......................... 3
- ENGL 47: Introduction to Shakespeare ................. 3

FASHION MERCHANDISING MARKETING/HOME ECONOMICS
- SEE MARKETING

FIRE TECHNOLOGY

BASIC FIRE ACADEMY – MAJOR #883B
The Basic Fire Academy program offers curriculum to prepare students with the knowledge and skills necessary to become a State of California Certified Firefighter 1. Employment opportunities are found in various branches of government and the private sector.

The academy is offered in two different formats, an intensive 40 hours per week program or an extended 24 hours per week night program.

CERTIFICATE OF ACHIEVEMENT

PROGRAM REQUIREMENTS
To qualify for the program, applicants must:
- A. Be 18 years of age or have a high school diploma or G.E.D.
- B. Applicant with prior college work must be on good academic and progress standing on all college work attempted.
- C. Have successfully completed minimum of Public Safety First Aid and CPR (CA Health and Safety Code 1797.182).
- D. Possess a valid California driver's license.
- E. Provide proof of a clear physical examination including an electrocardiogram printout (EKG).
- F. Contact the Fire Academy Coordinator.

Student Learning Outcomes:
1. Demonstrate specific skills, knowledge and abilities in routine and emergency firefighting operations.
2. Manipulate, inspect, and maintain firefighting and rescue equipment.
3. Display the personal and professional attitude and discipline necessary for employment in the firefighting profession.

REQUIRED COURSES

FIRET 130A: Basic Fire Academy – Part 1 .................. 13
FIRE 130B: Basic Fire Academy – Part 2 .................. 12.5
Total .......................... 25.5

FIRE TECHNOLOGY – MAJOR #883A
This program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service careers. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire fighting and fire technology.
ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Given a typical type of fire department, describe the organizational structure and all of the staff functions within it.
2. Given a specific function of the fire service, describe the purpose of a paid and volunteer firefighter.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 1</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 2</td>
<td>Fire Prevention Technology</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 3</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 4</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 5</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 14</td>
<td>Principles of Fire &amp; Emergency</td>
<td></td>
</tr>
<tr>
<td>MATH 103</td>
<td>Foundations of Algebra, or</td>
<td>3-5</td>
</tr>
<tr>
<td>AT 130</td>
<td>Introductory Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 11</td>
<td>Services Safety &amp; Survival</td>
<td>3</td>
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</table>

COURSE OPTIONS: Select 12 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRET 8</td>
<td>Fire Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 9</td>
<td>Basic Fire Academy - Part 1</td>
<td>6</td>
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<tr>
<td>FIRET 131</td>
<td>Emergency Medical Technician 1</td>
<td>9.5</td>
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<tr>
<td>**FIRET 135</td>
<td>Emergency Medical Technician-Paramedic - Field Internship</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Total Units: 39-41

Suggested sequence of courses:

FIRST YEAR

First Semester
- MATH 103
- PHYS 11

Second Semester
- FIRET 1
- FIRET 2
- FIRET 5

SECOND YEAR

First Semester
- AT 10
- FIRET 14

Second Semester
- FIRET 3
- FIRET 4

* FIRET 130A carries a value of up to 13 units; however, only 6 units can be applied to the associate in science degree.
** FIRET 135 is the final course of three courses required to successfully complete the Paramedic program.

Note: The associate degree additionally requires completion of the requirements listed in the Graduation Requirements section of this catalog.

FIRE TECHNOLOGY - MAJOR #883A

This program is designed to provide the student with updated skills and knowledge necessary to complete and successfully apply for fire service careers. The curriculum serves as an in-service program as well as a pre-employment program for students seeking employment or advancement in the profession of fire fighting and fire technology.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Given a typical type of fire department, describe the organizational structure and all of the staff functions within it.
2. Given a specific function of the fire service, describe the purpose of a paid and volunteer firefighter.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AT 130</td>
<td>Industrial Mathematics, or</td>
<td>3</td>
</tr>
<tr>
<td>MATH 103</td>
<td>Foundations of Algebra</td>
<td>3-5</td>
</tr>
<tr>
<td>FIRET 1</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 2</td>
<td>Fire Prevention Technology</td>
<td>3</td>
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<tr>
<td>FIRET 3</td>
<td>Fire Protection Equipment and Systems</td>
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<tr>
<td>FIRET 14</td>
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<tr>
<td>MATH 113</td>
<td>Introductory Physical Science</td>
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<td>MATH 114</td>
<td>Services Safety &amp; Survival</td>
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COURSE OPTIONS: Select 12 Units

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<tr>
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</tr>
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<tr>
<td>FIRET 8</td>
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<tr>
<td>**FIRET 135</td>
<td>Emergency Medical Technician-Paramedic - Field Internship</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Total Units: 39-41

Suggested sequence of courses:

FIRST YEAR

First Semester
- AT 130
- PHYS 11

Second Semester
- FIRET 1
- FIRET 2
- FIRET 5

SECOND YEAR

First Semester
- AT 10
- FIRET 14

Second Semester
- Options

Note: The associate degree additionally requires completion of the requirements listed in the Graduation Requirements section of this catalog.
Second Semester

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>FIRET 3</td>
<td>Fire Protection Equipment and Systems</td>
</tr>
<tr>
<td>3</td>
<td>FIRET 4</td>
<td>Building Construction for Fire Protection</td>
</tr>
</tbody>
</table>

* FIRET 130A carries a value of up to 13 units; however, only 6 units can be applied to the certificate of achievement.

** FIRET 135 is the final course of three courses required to successfully complete the Paramedic program.

Note: The certificate of achievement requires completion of the major (27 units) and 12 units of recommended course options with a GPA of 2.0 or better.

**FIREIGHTER II – MAJOR #8835**

Provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance.

**CERTIFICATE**

**Student Learning Outcome:**
1. Identify proper equipment necessary to mitigate incident presented during a scenario simulation.
2. Initiate proper communication process during routine and emergency situations.
3. Perform proper rescue techniques removing victims in emergency simulations.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Description</th>
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<tbody>
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<td>2</td>
<td>FIRET 222A</td>
<td>Firefighter II Part A</td>
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<td>3</td>
<td>FIRET 222B</td>
<td>Firefighter II Part B</td>
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**EMERGENCY MEDICAL TECHNICIAN 1 REFRESHER – MAJOR #8843**

Designed for the student needing to complete the “continuing education” (CE) requirements necessary to maintain their EMT-B certification status.

**CERTIFICATE**

**Student Learning Outcome:**
1. Upon successful completion of the program the student will have satisfied all the required, Continuing Education (CE) hours for Emergency Medial Technician-B recertification.

**REQUIRED COURSE**

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>FIRET 261</td>
<td>Emergency Medical Technician I Refresher</td>
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</tbody>
</table>

**PREHOSPITAL PARAMEDIC CARE – MAJOR #8845**

Designed to prepare personnel in the fire, life safety and related fields to render advanced emergency medical care to the ill and injured in the pre-hospital environment, in accordance with all federal, state and local emergency medical services authorities.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcome:**
1. Upon successful completion of the program, the student will be eligible to take the National Registered Emergency Medical Technician (NREMT)/California State licensure examination necessary to become a licensed paramedic.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.5</td>
<td>FIRET 131</td>
<td>Emergency Medical Technician I</td>
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<tr>
<td>22</td>
<td>FIRET 133</td>
<td>Emergency Medical Technician - Didactic</td>
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<tr>
<td>4</td>
<td>FIRET 134</td>
<td>Emergency Medical Technician - Clinical</td>
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<tr>
<td>8.5</td>
<td>FIRET 135</td>
<td>Emergency Medical Technician – Field Internship</td>
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</table>

**FOOD AND NUTRITION – MAJOR #5682**

This degree is designed to prepare students for entry level employment in nutrition programs or food service. This degree prepares students for transfer to four year college in dietetics or culinology.

**ASSOCIATE IN SCIENCE DEGREE**

**Student Learning Outcomes:**
1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Identify and compare preparation methods to optimize nutritional content.
3. Evaluate the nutritional content of foods and menus.
REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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ELECTIVES: Select 18 Units

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<td>BIOL 22</td>
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<td>BIOL 31</td>
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<td>CHEM 3A</td>
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<td>FN 41</td>
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<tr>
<td>FN 42</td>
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</tr>
<tr>
<td>FN 43</td>
<td>2</td>
</tr>
<tr>
<td>FSM 25</td>
<td>2</td>
</tr>
<tr>
<td>FSM 38</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 19-22

DIETARY AIDE – MAJOR #5750

This certificate is designed to prepare students for employment as a dietary aide in acute care, convalescent hospitals and residence care facilities.

CERTIFICATE

Student Learning Outcomes:
1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. With the guidance of a registered dietitian, ensure that the nutritional needs of the clients of a health care facility will be met.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 40</td>
<td>3</td>
</tr>
<tr>
<td>FN 45</td>
<td>3</td>
</tr>
<tr>
<td>FSM 19</td>
<td>4</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL 9

DIETARY SERVICE SUPERVISOR – MAJOR #5681

The certificate of achievement prepares students for employment in a food service department within health care facilities such as hospitals, skilled nursing, assisted living or adult day care centers. This program meets the California Department of Public Health requirements for certification/approval.

Course grades are earned through the development of competencies needed for successful employment as a Dietary Service Supervisor.

Consult with a member of the Food and Nutrition program staff before scheduling courses in the program. The student will be registered in the program and a program of study, including appropriate field experience, will be planned.
CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:
1. The students will be able to apply the state and federal regulations that govern the operation of a food service department in a long term health care facility.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 1</td>
<td>3</td>
</tr>
<tr>
<td>FN 40</td>
<td>3</td>
</tr>
<tr>
<td>FN 45</td>
<td>3</td>
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<tr>
<td>FSM 11</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19*</td>
<td>2</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
<tr>
<td>FSM 38</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 19

* One unit of FSM 19 can either be 75 hours paid or 60 hours volunteer. Two units of FSM 19 must be 120 hours volunteer.

Articulation of the Dietetics and Food Administration Major with CSUF

Fresno City College students planning to transfer to California State University, Fresno, into a Dietetics or Food Services major approved by the American Dietetics Association should take the following lower division courses before transferring to CSU, Fresno.

COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIOL 20</td>
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<tr>
<td>BIOL 22</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 31</td>
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<td>CHEM 3A</td>
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<td>CHEM 8A</td>
<td>3</td>
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<td>FN 40</td>
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</tr>
<tr>
<td>FN 1</td>
<td>3</td>
</tr>
<tr>
<td>FSM 19*</td>
<td>2</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
<tr>
<td>MATH 11</td>
<td>4</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>3</td>
</tr>
</tbody>
</table>

* Prerequisite to required course(s).
FOOD SERVICE MANAGEMENT

FOOD SERVICE MANAGEMENT – MAJOR #5691

This degree is designed to prepare students for employment in Food Service Management.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Evaluate the nutritional content of foods and menus.
3. Choose record keeping methods to monitor the fiscal viability of a food service establishment.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting, or BT 131 Applied Accounting</td>
<td>3.5-4</td>
</tr>
<tr>
<td>BA 18</td>
<td>Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or Honors Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FN 1</td>
<td>Principles of Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>FN 35</td>
<td>Nutrition and Health, or FN 40 Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSM 11</td>
<td>Food Service Supervision</td>
<td>2</td>
</tr>
<tr>
<td>FSM 15</td>
<td>Food Production Management</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>1-4</td>
</tr>
<tr>
<td>FSM 25</td>
<td>Food and Beverage Purchasing and Control</td>
<td>2</td>
</tr>
<tr>
<td>FSM 35</td>
<td>Food Services, Sanitation, Safety and Equipment</td>
<td>2</td>
</tr>
<tr>
<td>FSM 38</td>
<td>Quantity Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>34.5-38</strong></td>
</tr>
</tbody>
</table>

Note: The Food Service Management major consists of 34.5-35 units as indicated above. Students must complete the Food Service Management major and associate degree requirements are listed on page 35. General Education requirements for transfer certification are on page 47.

FOOD SERVICE MANAGEMENT – MAJOR #5691

This certificate of achievement is designed to prepare students for employment in Food Service Management.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
2. Evaluate the nutritional content of foods and menus.
3. Choose record keeping methods to monitor the fiscal viability of a food service establishment.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting, or BT 131 Applied Accounting</td>
<td>3.5-4</td>
</tr>
<tr>
<td>BA 18</td>
<td>Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
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</tr>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or Honors Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FN 1</td>
<td>Principles of Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>FN 35</td>
<td>Nutrition and Health, or FN 40 Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSM 11</td>
<td>Food Service Supervision</td>
<td>2</td>
</tr>
<tr>
<td>FSM 15</td>
<td>Food Production Management</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>1-4</td>
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<tr>
<td>FSM 25</td>
<td>Food and Beverage Purchasing and Control</td>
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</tr>
<tr>
<td>FSM 35</td>
<td>Food Services, Sanitation, Safety and Equipment</td>
<td>2</td>
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<tr>
<td>FSM 38</td>
<td>Quantity Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>34.5-38</strong></td>
</tr>
</tbody>
</table>

CHILD NUTRITION – MAJOR #5692

This certificate of achievement is designed to prepare students for employment in child care food programs.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Evaluate the nutritional content of foods and menus.
2. Identify the causes of food borne illness and the practices to prevent food borne illness in a food service system.
3. Analyze and write/modify menus to meet the needs of a child care food program.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>FN 1</td>
<td>Principles of Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>FN 35</td>
<td>Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>FSM 35</td>
<td>Food Services, Sanitation, Safety and Equipment</td>
<td>2</td>
</tr>
<tr>
<td>FSM 162</td>
<td>Menu Planning for Child Nutrition</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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</table>
ELECTIVES: Select 10 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BT 6</td>
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</tr>
<tr>
<td>FN 42</td>
<td>3</td>
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<tr>
<td>FSM 11</td>
<td>2</td>
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<tr>
<td>FSM 15</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19</td>
<td>2</td>
</tr>
<tr>
<td>FSM 25</td>
<td>2</td>
</tr>
<tr>
<td>FSM 38</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete 14 units of required core courses. Select an additional 10 units from the elective courses for the certificate of achievement.

GEOLOGY FOR TRANSFER - MAJOR #6070

Geology is a useful major for students with a variety of interests and career goals in the earth sciences including geology, hydrogeology, astrogeology, paleontology, mineralogy, engineering geology, geophysics, geochemistry, petroleum geology, oceanography and environmental science. The Associate in Science in Geology for Transfer program is designed for students who plan to complete a bachelor's degree in a similar major a CSU campus. To earn the Associate in Science in Geology for Transfer program, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 27 units within the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students must have a minimum grade point average of 2.0. Students must earn a C or better in all courses required for the major.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Identify distinguishing characteristics, properties, and origin of common rocks and minerals.
2. Explain the processes of plate tectonic theory and identify associated geologic features and events.
3. Determine the age relationships of rocks and fossils using various dating techniques.

CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1B</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 2</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2L</td>
<td>3</td>
</tr>
<tr>
<td>MATH 5A</td>
<td>5</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Explain the various meanings of globalization and identify regional differences.
2. Explain recurring and emerging global issues from a historical and interdisciplinary perspective.
3. Critically evaluate the effectiveness of national, regional and international efforts to solve problems associated with global issues.

GLOBAL STUDIES FOR TRANSFER – MAJOR #7740

The Associate in Arts in Global Studies for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus, to include Global Studies, Global Politics, International Relations, International Studies and Comparative Government. This degree will acquaint students with the interdisciplinary field of global studies and introduce students to various global issues with a focus on the analysis of causes and solutions. To earn the Associate in Arts in Global Studies for Transfer students must complete at least 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements, and at least 18 units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor for more information on transfer requirements and university admission.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Explain the various meanings of globalization and identify regional differences.
2. Explain recurring and emerging global issues from a historical and interdisciplinary perspective.
3. Critically evaluate the effectiveness of national, regional and international efforts to solve problems associated with global issues.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>GLST 1</td>
<td>3</td>
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<tr>
<td>GLST 2</td>
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<td>List A</td>
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</table>

Area 1: Culture and Society

<table>
<thead>
<tr>
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<th>Units</th>
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<tbody>
<tr>
<td>ANTHRO 2</td>
<td>3</td>
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<tr>
<td>HIST 23</td>
<td>3</td>
</tr>
</tbody>
</table>

Notes:
Additional recommended courses (not part of degree)

- Physics 4A and Physics 4B (8 units)
- or (see requirements of 4 year institution)
  - Physics 2A and Physics 2B (8 units)
  - Biology 3 (3.5 units)
  - Geology 3 (1-2 units)
  - Geology 11 (1-2 units)
## GRAPHIC COMMUNICATIONS

- FORMERLY PRINTING TECHNOLOGY AND REPROGRAPHICS
- MAJOR #8332

This program is geared for the student considering employment in graphic communications production. Successful completion provides an entry-level skill set and general understanding of production techniques ranging from computerized layout through output in print, digital video, Internet publishing, and digital media products.

ASSOCIATE IN SCIENCE DEGREE AND

CERTIFICATE OF ACHIEVEMENT

**Student Learning Outcome:**

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.

### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 40</td>
<td></td>
</tr>
<tr>
<td>GRC 15</td>
<td></td>
</tr>
<tr>
<td>GRC 17</td>
<td></td>
</tr>
<tr>
<td>GRC 20A</td>
<td></td>
</tr>
<tr>
<td>GRC 20B</td>
<td></td>
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<td>GRC 22</td>
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<tr>
<td>GRC 24A</td>
<td></td>
</tr>
<tr>
<td>GRC 24B</td>
<td></td>
</tr>
<tr>
<td>GRC 27</td>
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<tr>
<td>GRC 30</td>
<td></td>
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<tr>
<td>GRC 31</td>
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<td>GRC 41</td>
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### ELECTIVES (6 UNITS):

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<tbody>
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<td>GRC 16</td>
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<td>GRC 25</td>
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<td>GRC 32</td>
<td></td>
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<td>GRC 34</td>
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<tr>
<td>GRC 39A</td>
<td></td>
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<tr>
<td>GRC 40A</td>
<td></td>
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<td>GRC 51</td>
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<td>PHOTO 6</td>
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<td>PHOTO 12</td>
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</tbody>
</table>

Total 21-24

### RECOMMENDED SEQUENCE

**First Year - First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 40</td>
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<tr>
<td>GRC 20A</td>
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<td>GRC 41</td>
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Total 40

**Second Year - First Semester**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>GRC 15</td>
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<tr>
<td>GRC 17</td>
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<tr>
<td>GRC 20B</td>
<td></td>
</tr>
<tr>
<td>GRC 22</td>
<td></td>
</tr>
<tr>
<td>GRC 24A</td>
<td></td>
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<tr>
<td>GRC 24B</td>
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<tr>
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Total 40

**Second Year - Second Semester**

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>GRC 27</td>
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<tr>
<td>GRC 31</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
</tbody>
</table>

### GRAPHIC DESIGN - FORMERLY GRAPHIC DESIGN OPTION

- MAJOR #8507

The Graphic Design Option combines aspects of the graphic communication, fine art, and business curricula to provide a foundation in graphic design. The student will receive a background in art, computer graphics and web design with an understanding of the requirements and limitations of production.

ASSOCIATE IN ARTS DEGREE AND

CERTIFICATE OF ACHIEVEMENT

**Student Learning Outcome:**

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.
### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 7</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>AT 40</td>
<td>Preparing for Employment Opportunities</td>
<td>3</td>
</tr>
<tr>
<td>BA 38</td>
<td>Operation of the Small Business, or</td>
<td></td>
</tr>
<tr>
<td>BA 52</td>
<td>Introduction to Entrepreneurship, or</td>
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</tr>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing, or</td>
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</tr>
<tr>
<td>MKTG 11</td>
<td>Selling and Sales Management, or</td>
<td></td>
</tr>
<tr>
<td>MKTG 21</td>
<td>Digital Marketing</td>
<td>3</td>
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<tr>
<td>GRC 14</td>
<td>Adobe Acrobat Professional</td>
<td>3</td>
</tr>
<tr>
<td>GRC 15</td>
<td>Web Page Design</td>
<td>4</td>
</tr>
<tr>
<td>GRC 17</td>
<td>Adobe Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>GRC 20A</td>
<td>Intro to Applied Graphics – Adobe Tools</td>
<td>3</td>
</tr>
<tr>
<td>GRC 20B</td>
<td>Intro to Applied Graphics – Media</td>
<td>3</td>
</tr>
<tr>
<td>GRC 30</td>
<td>Adobe InDesign/Professional Publishing</td>
<td>3</td>
</tr>
<tr>
<td>GRC 31</td>
<td>Intermediate Photoshop</td>
<td>3</td>
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<tr>
<td>GRC 39A</td>
<td>Introduction to Graphic Design</td>
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</tr>
<tr>
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<td>Intermediate Graphic Design</td>
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### RECOMMENDED ELECTIVES (6 UNITS):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GRC 16</td>
<td>Web Design Techniques</td>
<td>4</td>
</tr>
<tr>
<td>GRC 22</td>
<td>Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>GRC 23</td>
<td>Video Editing – Adobe Premiere Pro</td>
<td>3</td>
</tr>
<tr>
<td>GRC 25</td>
<td>CMS Web Design</td>
<td>3</td>
</tr>
<tr>
<td>GRC 32</td>
<td>Video Techniques</td>
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</tr>
<tr>
<td>GRC 34</td>
<td>Introduction to 3-D Animation</td>
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<tr>
<td>GRC 51</td>
<td>Storyboarding</td>
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<td>GRC 52</td>
<td>Adobe Lightroom</td>
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<tr>
<td>GRC 53</td>
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<td>PHOTO 6</td>
<td>Digital Imaging Fundamentals</td>
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</tr>
<tr>
<td>PHOTO 12</td>
<td>Beginning Photoshop</td>
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</table>

**Total** 43 UNITS

### RECOMMENDED SEQUENCE

**First Year - First Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART 7</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>AT 40</td>
<td>Preparing for Employment Opportunities</td>
<td>3</td>
</tr>
<tr>
<td>GRC 17</td>
<td>Adobe Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>GRC 20A</td>
<td>Intro to Applied Graphics – Adobe Tools</td>
<td>3</td>
</tr>
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</table>

**First Year - Second Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 15</td>
<td>Web Page Design</td>
<td>4</td>
</tr>
<tr>
<td>GRC 30</td>
<td>Adobe InDesign/Professional Publishing</td>
<td>3</td>
</tr>
<tr>
<td>GRC 31</td>
<td>Intermediate Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>GRC 39A</td>
<td>Introduction to Graphic Design</td>
<td>3</td>
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**Second Year - First Semester**

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GRC 14</td>
<td>Adobe Acrobat Professional</td>
<td>3</td>
</tr>
<tr>
<td>GRC 20B</td>
<td>Intro to Applied Graphics - Media</td>
<td>3</td>
</tr>
<tr>
<td>GRC 40A</td>
<td>Intermediate Graphic Design</td>
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**Second Year - Second Semester**

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<th>Course Title</th>
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<tbody>
<tr>
<td>BA 38</td>
<td>Operation of the Small Business, or</td>
<td></td>
</tr>
<tr>
<td>BA 52</td>
<td>Introduction to Entrepreneurship, or</td>
<td></td>
</tr>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing, or</td>
<td></td>
</tr>
<tr>
<td>MKTG 11</td>
<td>Selling and Sales Management, or</td>
<td></td>
</tr>
<tr>
<td>MKTG 21</td>
<td>Digital Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

### DIGITAL VIDEO – FORMERLY DIGITAL VIDEO OPTION - MAJOR #8509

**CERTIFICATE**

**Student Learning Outcomes:**

1. Successfully operate a digital video camera to capture footage in a variety of lighting conditions.
2. Capture audio using a digital recorder and compile it with existing audio tracks while maintaining synchronization.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 23</td>
<td>Video Editing – Adobe Premiere Pro</td>
<td>3</td>
</tr>
<tr>
<td>GRC 27</td>
<td>Digital Video Production</td>
<td>3</td>
</tr>
<tr>
<td>GRC 32</td>
<td>Video Techniques</td>
<td>3</td>
</tr>
<tr>
<td>GRC 51</td>
<td>Storyboarding</td>
<td>1</td>
</tr>
<tr>
<td>GRC 53</td>
<td>Adobe After Effects</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 13 UNITS

### DIGITAL MEDIA – FORMERLY DIGITAL MEDIA OPTION AND MULTIMEDIA OPTION - MAJOR #8508

**CERTIFICATE**

**Student Learning Outcome:**

1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GRC 22</td>
<td>Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>GRC 24A</td>
<td>Intro 2-D Animation with Adobe Animate, or</td>
<td>3</td>
</tr>
<tr>
<td>GRC 24B</td>
<td>Intro 2-D Animation – Harmony Software</td>
<td>3</td>
</tr>
<tr>
<td>GRC 34</td>
<td>Introduction to 3-D Animation</td>
<td>3</td>
</tr>
<tr>
<td>GRC 41</td>
<td>Visual Communications</td>
<td>3</td>
</tr>
<tr>
<td>GRC 51</td>
<td>Storyboarding</td>
<td>1</td>
</tr>
<tr>
<td>GRC 53</td>
<td>Adobe After Effects</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 16 UNITS
VISUAL COMMUNICATIONS – MAJOR #8510

This certificate provides evidence of skill development for entry level employment in the preparation of media for visual communication.

CERTIFICATE

Student Learning Outcome:
1. Demonstrate competency in visual communication techniques and visual design theory through the use of application specific software and hardware.

CORE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 20A</td>
<td>Intro to Applied Graphics – Adobe Tools</td>
<td>3</td>
</tr>
<tr>
<td>GRC 41</td>
<td>Visual Communications</td>
<td>3</td>
</tr>
<tr>
<td>GRC 52</td>
<td>Adobe Lightroom</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 23</td>
<td>Advanced Photoshop</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

WEB DESIGN - MAJOR #8502

This certificate of achievement is evidence of knowledge of the preparation of graphics and web sites for the Internet. Through the creation and capture of images, creation of animation, and layout/design of pages, the student gains insight into graphic industry standards.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:
1. Demonstrate competency in communication techniques and visual design theory through the use of application specific software and hardware.

COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 15</td>
<td>Web Page Design</td>
<td>4</td>
</tr>
<tr>
<td>GRC 16</td>
<td>Web Design Techniques</td>
<td>4</td>
</tr>
<tr>
<td>GRC 24A</td>
<td>Intro 2-D Animation with Adobe Animate, or</td>
<td></td>
</tr>
<tr>
<td>GRC 24B</td>
<td>Intro 2-D Animation – Harmony Software</td>
<td>3</td>
</tr>
<tr>
<td>GRC 25</td>
<td>CSM Web Design</td>
<td>3</td>
</tr>
<tr>
<td>GRC 41</td>
<td>Visual Communications</td>
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</table>

HEALTH INFORMATION TECHNOLOGY - FORMERLY MEDICAL RECORD TECHNOLOGY – MAJOR #4621

The Health Information Technology (HIT) Program prepares students for a career working in health information management in a variety of healthcare settings. HIT professionals perform the essential functions of acquiring, analyzing, and protecting digital and medical information. Through the use of technology and expertise in data integrity, confidentiality, and security, their work contributes to quality patient care. Job responsibilities may include coding, data collection, documentation analysis, quality improvement, release of information, or supervision.

The HIT Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Successful completion of the Health Information Technology Program qualifies the graduate for an associate in science degree and eligibility to take the Registered Health Information Technician (RHIT) exam administered by the American Health Information Management Association (AHIMA).

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:
1. Apply the knowledge and skills for health information management according to the entry-level competencies of the American Health Information Management Association HIM Curriculum.
2. Pass the Registered Health Information Technician examination.

Recommended Sequence of Courses

First Semester – Fall

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>*BIOL 5</td>
<td>Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HIT 1</td>
<td>Introduction to Health Information Management</td>
<td>3</td>
</tr>
<tr>
<td>HIT 10</td>
<td>Medical Terminology</td>
<td>3</td>
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Second Semester - Spring

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>HIT 2</td>
<td>Legal Aspects of Health Information</td>
<td>3</td>
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<tr>
<td>HIT 4</td>
<td>Disease Process</td>
<td>3</td>
</tr>
<tr>
<td>HIT 5</td>
<td>Introduction to Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIT 12</td>
<td>Health Information in Alternative Settings</td>
<td>2</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
<td>3</td>
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Third Semester - Fall

<table>
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<th>COURSE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>HIT 3</td>
<td>Quality Improvement</td>
<td>2</td>
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<tr>
<td>HIT 6</td>
<td>Coding and Reimbursement</td>
<td>3</td>
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<tr>
<td>HIT 9</td>
<td>Hospital and Health Statistics</td>
<td>2</td>
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<tr>
<td>HIT 14</td>
<td>HIM Technology and Systems</td>
<td>3</td>
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Fourth Semester - Spring

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<tr>
<td>HIT 7</td>
<td>Directed Practice</td>
<td>4</td>
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<tr>
<td>HIT 8</td>
<td>Health Information Management and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>HIT 11</td>
<td>CPT Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIT 16</td>
<td>Healthcare Reimbursement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</tbody>
</table>

Notes:
1. The associate degree requires the completion of additional units and requirements listed with a 2.0 or better GPA.
2. *BIOL 20 and 22 may be substituted for *BIOL 5.
3. In addition to all major associate degree requirements, students must take a 3-unit elective of their choice. Recommended areas are accounting, business computer application software, finance, management, professional writing, and statistics.
4. Academic credit earned in accredited institutions of higher education or AHIMA approved schools of Health Information Technology for comparable courses will be accepted for transfer. Equivalency will be determined on the basis of catalog description, course outline, content comparison, and hour distribution. Credit by examination, when acceptable, may be required when equivalency cannot be determined.

2019-2020 Fresno City College Catalog
MEDICAL CODING - MAJOR #4627

The medical coding certificate program prepares students for a position as a coder in a hospital, physician office, clinic, long-term care facility, and other healthcare settings. Coders review patient health information, analyze and extract data, and ensure appropriate codes are assigned for internal and external data reporting, billing, research, and regulatory compliance.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Evaluate the content of patient health records and assign diagnostic and procedure codes following regulatory guidelines.
2. Use computer technology and applications as a coding professional would in the regular course of business for HIM functions such as the electronic health record, encoding, abstracting, billing, and revenue management.

Recommended Sequence of Courses

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIOL 5</td>
<td>4</td>
</tr>
<tr>
<td>HIT 1</td>
<td>3</td>
</tr>
<tr>
<td>HIT 10</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>CIT 15</td>
<td>3</td>
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<tr>
<td>HIT 4</td>
<td>3</td>
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<td>HIT 5</td>
<td>3</td>
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<td><strong>Total</strong></td>
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Third Semester

<table>
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<tbody>
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<td>HIT 6</td>
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<tr>
<td>HIT 14</td>
<td>3</td>
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<tr>
<td>MA 2</td>
<td>3</td>
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<td><strong>Total</strong></td>
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Fourth Semester

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<tr>
<td>HIT 16</td>
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</table>

Note:
* BIOL 20 and 22 may be substituted for BIOL 5.

HEATING, VENTILATION, AND AIR CONDITIONING – FORMERLY AIR CONDITIONING

HVAC TECHNOLOGY III

– FORMERLY AIR CONDITIONING – MAJOR #8040

Students who successfully complete the HVAC Technology III program have been equipped with advanced level HVAC (Heating, Ventilation, and Air Conditioning) skill sets, complimented by study in metal fabrication, computers, communication, digital control systems, and general education. The curriculum incorporates laboratory and classroom assignments that develop a fundamental understanding of HVAC technology. Students also develop advanced hands-on HVAC skills that prepare them for a technical career with advancement potential in the HVAC industry—e.g., brazing, cooling and heating “tune-ups”, electrical and refrigerant circuit diagnosis, air distribution design and diagnosis, EPA Section 608 refrigerant handling, welding, wireless HVAC controls, and communication.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Demonstration of advanced HVAC skills through the achievement of applicable industry certification(s).

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>HVAC 50</td>
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<tr>
<td>HVAC 51</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 52</td>
<td>6.5</td>
</tr>
<tr>
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<td>HVAC 54</td>
<td>6.5</td>
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<tr>
<td>HVAC 55</td>
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</tr>
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<td>HVAC 56</td>
<td>2</td>
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<tr>
<td>HVAC 57</td>
<td>2</td>
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<tr>
<td>HVAC 150</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

HVAC TECHNOLOGY II

– FORMERLY AIR CONDITIONING – MAJOR #8042

Students who successfully complete the HVAC Technology II program have been equipped with intermediate-level HVAC (Heating, Ventilation, and Air Conditioning) skill sets, complimented by study in metal fabrication, computers, communication, and digital control systems. The curriculum incorporates laboratory and classroom assignments that develop a fundamental understanding of HVAC technology. Students also develop advanced hands-on HVAC skills that prepare them for a technical career in the HVAC industry—e.g., brazing, cooling and heating “tune-ups”, electrical and refrigerant circuit diagnosis, air distribution design and diagnosis, EPA Section 608 refrigerant handling, welding, and wireless HVAC controls.
CERTIFICATE OF ACHIEVEMENT

History 203

HISTORY FOR TRANSFER – MAJOR #7380

History is our changing perspective on the past. Historians attempt not only to understand the causes and significance of human actions in the past but also to interpret those past actions to others, through teaching, publications, lectures, exhibits, documentaries, and conversations. Knowledge of history provides insight into human nature, enhances our understanding of the present, and guides choices for the future. The Associate in Arts in History for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the Associate in Arts in History for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 units within the major, with a minimum GPA 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. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Digital controls are perhaps the most important component of a modern HVAC system. They refine occupant comfort while communicating with other networked electro-mechanical building systems for optimum efficiency. The successful HVAC Wireless Control certificate holder has mastered basic direct digital control principles, and has practiced their knowledge in the study, programming and commissioning of wireless communicating control systems.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstration of advanced HVAC skills through the achievement of applicable industry certification(s).

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC 50</td>
<td>HVAC Introduction</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 51</td>
<td>HVAC Comfort Systems</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 52</td>
<td>HVAC System Components</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 53</td>
<td>HVAC Comfort Troubleshooting</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 54</td>
<td>HVAC System Troubleshooting</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 56</td>
<td>HVAC System Installation</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 57</td>
<td>HVAC Digital Control Principles</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 150</td>
<td>Wireless HVAC Controls</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34</td>
</tr>
</tbody>
</table>

HVAC TECHNOLOGY I – FORMERLY AIR CONDITIONING, COMMERCIAL AIR CONDITIONING, HEATING, AND DUCT SYSTEMS – MAJOR #8041

Students who successfully complete the HVAC Technology I program are equipped with entry level HVAC (Heating, Ventilation, and Air Conditioning) skill sets. The curriculum incorporates laboratory and classroom assignments that develop a fundamental understanding of HVAC technology. Students also develop hands-on HVAC skills that prepare them for a technical career in the HVAC industry—e.g., brazing, cooling and heating “tune-ups”, electrical and refrigerant circuit diagnosis, air distribution diagnosis, design and construction, and EPA Section 608 refrigerant handling.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstration of entry-level HVAC skills through the achievement of applicable industry certification.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC 50</td>
<td>HVAC Introduction</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 51</td>
<td>HVAC Comfort Systems</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 52</td>
<td>HVAC System Components</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 53</td>
<td>HVAC Comfort Troubleshooting</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 54</td>
<td>HVAC System Troubleshooting</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 56</td>
<td>HVAC System Installation</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 57</td>
<td>HVAC Digital Control Principles</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 150</td>
<td>Wireless HVAC Controls</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
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</tbody>
</table>

HVAC WIRELESS CONTROL I – FORMERLY AIR CONDITIONING, DIGITAL AIR CONDITIONING CONTROLS – MAJOR #8043

Digital controls are perhaps the most important component of a modern HVAC system. They refine occupant comfort while communicating with other networked electro-mechanical building systems for optimum efficiency. The successful HVAC Wireless Control certificate holder has mastered basic direct digital control principles, and has practiced their knowledge in the study, programming and commissioning of wireless communicating control systems.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Identify the appropriate application for binary and/or analog, inputs and outputs.
2. Program and commission a wireless thermostatic control.
3. Configure and manage a network of wireless communicating thermostats.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
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<tr>
<td>HVAC 54</td>
<td>HVAC System Processes</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 57</td>
<td>HVAC Digital Control Principles</td>
<td>2</td>
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<td></td>
<td>Total</td>
<td>13.5</td>
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</tbody>
</table>
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Analyze and evaluate the validity and significance of historical information from multiple primary and secondary sources.
2. Demonstrate a familiarity with the main figures, events and concepts in the histories of multiple societies.
3. Assess the relative significance of several factors (e.g. race, class, gender, technological change) in shaping the history of multiple societies.

REQUIRED UNITED STATES HISTORY COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 11</td>
<td>History of the United States to 1877</td>
</tr>
<tr>
<td>HIST 12</td>
<td>History of the United States since 1877</td>
</tr>
</tbody>
</table>

LIST A - Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1/1H</td>
<td>Western Civilization to 1648, or Honors Western Civilization to 1648</td>
</tr>
<tr>
<td>HIST 20</td>
<td>World History I, to 1600</td>
</tr>
</tbody>
</table>

LIST B - Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2/2H</td>
<td>Western Civilization since 1648, or Honors Western Civilization since 1648</td>
</tr>
<tr>
<td>HIST 23</td>
<td>World History II, since 1500</td>
</tr>
</tbody>
</table>

LIST C - Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 17</td>
<td>History of the Muslim World to 1405</td>
</tr>
<tr>
<td>HIST 20</td>
<td>World History I, to 1600</td>
</tr>
<tr>
<td>HIST/WSTS 22</td>
<td>History of American Women</td>
</tr>
<tr>
<td>HIST 23</td>
<td>World History II, since 1500</td>
</tr>
<tr>
<td>HIST 29</td>
<td>History of Mexico, Colonial to Contemporary Period</td>
</tr>
<tr>
<td>HIST 34</td>
<td>History of the American Civil Rights Movement</td>
</tr>
</tbody>
</table>

History 20 or 23 may be used for list C only if not used in lists A or B.

LIST D - Select one from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3</td>
<td>History of Ancient Rome</td>
</tr>
<tr>
<td>HIST 15</td>
<td>History of the British Isles</td>
</tr>
<tr>
<td>HIST 18</td>
<td>History of Ancient Greece</td>
</tr>
<tr>
<td>HIST 21</td>
<td>United States Civil War</td>
</tr>
<tr>
<td>HIST 25</td>
<td>History of Religion in the United States</td>
</tr>
<tr>
<td>HIST 30</td>
<td>California History</td>
</tr>
</tbody>
</table>

Student Learning Outcomes:
Because this is a comprehensive general education program, students who complete the Honors Certificate program will be able to:
1. Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
2. Express an understanding of the relationship between science and other human activities.
3. Articulate an understanding of the relationships between the arts, the humanities and themselves.
4. Write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.
5. Apply logical reasoning to make decisions, solve problems, explain conclusions, and evaluate evidence.

FIRST SEMESTER REQUIRED COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1AH</td>
<td>Honors Reading and Composition</td>
</tr>
</tbody>
</table>

* (Students who have completed ENGL 1A or equivalent should choose 15 units from elective courses.)

ELECTIVE COURSES: Select 11 units with at Least One Colloquium Unit

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2H</td>
<td>Honors Cultural Anthropology</td>
</tr>
<tr>
<td>ART 5H</td>
<td>Honors Art History Ancient to Medieval</td>
</tr>
<tr>
<td>ART 6H</td>
<td>Honors Art History Renaissance to Modern</td>
</tr>
<tr>
<td>BIOL 11AH</td>
<td>Honors Biology for Science Majors</td>
</tr>
<tr>
<td>COMM 8H</td>
<td>Honors Group Communication</td>
</tr>
<tr>
<td>ECON 40H</td>
<td>Honors Introduction to Microeconomics</td>
</tr>
<tr>
<td>ECON 50H</td>
<td>Honors Introduction to Macroeconomics</td>
</tr>
<tr>
<td>ENGL 3H</td>
<td>Honors Critical Reading &amp; Writing</td>
</tr>
<tr>
<td>HIST 12H</td>
<td>Honors History of the United States since 1877</td>
</tr>
<tr>
<td>HONORS 1A</td>
<td>Honors Science Colloquium</td>
</tr>
<tr>
<td>HONORS 1C</td>
<td>Honors Humanities Colloquium</td>
</tr>
<tr>
<td>HONORS 1D</td>
<td>Honors Business &amp; Economics Colloquium</td>
</tr>
<tr>
<td>HONORS 1E</td>
<td>Honors Social Science Colloquium</td>
</tr>
<tr>
<td>HONORS 1F</td>
<td>Honors Phi Theta Kappa Colloquium</td>
</tr>
<tr>
<td>MATH 11H</td>
<td>Honors Elementary Statistics</td>
</tr>
<tr>
<td>PHIL 1AH</td>
<td>Honors Theories of Knowledge and Reality</td>
</tr>
<tr>
<td>PHIL 1CH</td>
<td>Honors Ethics</td>
</tr>
<tr>
<td>PHIL 2H</td>
<td>Honors Critical Reasoning and Analytic Writing</td>
</tr>
<tr>
<td>POLSCI 2H</td>
<td>Honors American Government</td>
</tr>
<tr>
<td>PSY 2H</td>
<td>Honors General Psychology</td>
</tr>
<tr>
<td>SOC 1AH</td>
<td>Honors Introduction to Sociology</td>
</tr>
</tbody>
</table>

HONORS PROGRAM

LEON S. PETERS HONORS PROGRAM
– MAJOR #5331

CERTIFICATE

A Leon S. Peter Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 15 credits of Honors courses including one colloquium unit with an overall GPA of 3.2 or better.
### HONORS PROGRAM COMMENDATION

- MAJOR #5332

A Leon S. Peters Commendation Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 9 units of Honors courses, including 1 colloquium unit, with an overall GPA of 3.2 or better.

#### CERTIFICATE

**Student Learning Outcomes:**

1. Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
2. Express an understanding of the relationship between science and other human activities.
3. Articulate an understanding of the relationships between the arts, the humanities and themselves.
4. Write clear, logically organized essays using expository and argumentative modes and applying conventions of documentation when appropriate.
5. Apply logical reasoning to make decisions, solve problems, explain conclusions, and evaluate evidence.

#### ELECTIVE COURSES: Select a minimum of 8 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2H</td>
<td>Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ART 5H</td>
<td>Honors Art History Ancient to Medieval</td>
<td>3</td>
</tr>
<tr>
<td>ART 6H</td>
<td>Honors Art History Renaissance to Modern</td>
<td></td>
</tr>
<tr>
<td>BIOL 11AH</td>
<td>Honors Biology for Science Majors 1</td>
<td>5</td>
</tr>
<tr>
<td>COMM 8H</td>
<td>Honors Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40H</td>
<td>Honors Introduction to Microeconomics, or</td>
<td></td>
</tr>
<tr>
<td>ECON 50H</td>
<td>Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1AH</td>
<td>Honors Reading and Composition, or</td>
<td></td>
</tr>
<tr>
<td>ENGL 1BH</td>
<td>Honors Introduction to the Study of Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3H</td>
<td>Honors Critical Reading &amp; Writing, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 2H</td>
<td>Honors Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 12H</td>
<td>Honors History of the United States since 1877</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11H</td>
<td>Honors Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 1AH</td>
<td>Honors Theories of Knowledge and Reality</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1CH</td>
<td>Honors Ethics</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2H</td>
<td>Honors American Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2H</td>
<td>Honors General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1AH</td>
<td>Honors Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

#### COLLOQUIA: Select a minimum of 1 unit

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HONORS 1A</td>
<td>Honors Sciences Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1C</td>
<td>Honors Humanities Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1D</td>
<td>Honors Business &amp; Economics Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1E</td>
<td>Honors Social Science Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1F</td>
<td>Honors Phi Theta Kappa Colloquium</td>
<td>1</td>
</tr>
</tbody>
</table>

### HUMAN SERVICES

#### ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION – MAJOR #7951

This degree is designed for students interested in working in the field of chemical dependency. Completion of the total program will broaden a candidate's understanding and assist in preparation needed to enter the field.

These core classes of the degree are accredited by the California Association for Alcohol/Drug Educators (CAAAE) and recognized by the other counselor certification organizations in California. The degree offers courses work leading to a certificate of achievement, and an AS degree in Alcoholism and Drug Abuse Counseling.

#### ASSOCIATE IN SCIENCE DEGREE

**Student Learning Outcomes:**

1. Demonstrate a fundamental working knowledge of the Alcohol and Other Drug Abuse program.
2. Be prepared for entry-level employment in an Alcohol or Other Drug Program.
3. Demonstrate an understanding of the 12 core competencies and their application to the treatment of substance use disorders.

#### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS/SOC 10</td>
<td>Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 18</td>
<td>Alcohol and Drug Abuse Counseling: Professional</td>
<td>3</td>
</tr>
<tr>
<td>HS 20</td>
<td>Fund of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 24</td>
<td>Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, Outreach and Referral</td>
<td>3</td>
</tr>
<tr>
<td>HS 40</td>
<td>Alcohol and Drug Abuse Counseling: Case Management</td>
<td>3</td>
</tr>
<tr>
<td>HS 42</td>
<td>Introduction to Alcohol and Drug Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 43</td>
<td>Alcohol and Drug Abuse Counseling:</td>
<td></td>
</tr>
<tr>
<td>HS 44</td>
<td>Drug Use: Physical and Psychological Effects</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>29</td>
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</tbody>
</table>

#### COURSE OPTIONS: Select 7 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>Introduction to African American Studies, or</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>American Indian in Contemporary Society, or</td>
<td></td>
</tr>
<tr>
<td>CLS/SOC 14</td>
<td>Sociology of the Mexican American Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 5</td>
<td>Parent Education</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY 12</td>
<td>Child Abuse</td>
<td>3</td>
</tr>
<tr>
<td>HS/WSTS 25</td>
<td>Assertiveness Training</td>
<td>2</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>General Psychology, or</td>
<td></td>
</tr>
<tr>
<td>PSY 5</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 16</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>
ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION – MAJOR #7951

This certificate is designed for students interested in working in the field of chemical dependency. Completion of the total certificate of achievement will broaden a candidate’s understanding and assist in preparation needed to enter the field.

This certificate is accredited by the California Association for Alcohol/Drug Educators (CAADE) and recognized by the other three certifying organizations in California.

The Alcoholism and Drug Abuse Counseling Certificate program offers course work leading to a certificate of achievement.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Upon completion, the student will be eligible to take the State of California approved test to become an Alcohol and Other Drug Counselor.
2. Students will take and successfully complete the State of California approved written exam from one of the 4 certifying organizations.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 18</td>
<td>Alcohol and Drug Abuse Counseling: Professional and Personal Growth...</td>
<td>3</td>
</tr>
<tr>
<td>HS 19B</td>
<td>Work Experience (Cooperative), Occupational....</td>
<td>2</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 40</td>
<td>Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education,...</td>
<td>3</td>
</tr>
</tbody>
</table>

Notes:
1. An AS degree will be awarded to any Alcohol and Drug Abuse Counseling Certificate candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 36 units of course work in the major as listed above.
2. Associate degree requirements are listed on page 35. General Education requirements for transfer certification are on page 47.

ELDER CARE HUMAN SERVICES - MAJOR #7634

The Certificate of Achievement in Elder Care Human Services is designed to prepare students for entry level work in social services settings with adults, aged 65 years and older or, with additional completed general education course work, to transfer as a junior to a baccalaureate degree program in Social Work. This Certificate is for a person who has a strong desire to provide human services to older adults. These introductory courses will give the student a good fundamental working knowledge of the social services system addressing the needs of older adults.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Apply Systems Theory, the Strengths Perspective, and National Association of Social Workers Code of Ethics to determine the intertwined needs of an elder client and construct a case plan.
2. Illustrate the importance of culture in the functioning of and service provision to an elder client.
3. Analyze challenges encountered by elder care human services providers, including Internal and External barriers.
4. Identify and distinguish social services, health care, legal, and financial services providers available to the elderly.
REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 10</td>
<td>Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 11</td>
<td>Elder Care Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HS 19A</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 24</td>
<td>Fundamentals of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 44</td>
<td>Drug Use: Physical and Psychological Effects</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

PRE-SOCIAL WORK OPTION – FORMERLY SOCIAL WORK OPTION - MAJOR #7633

This degree is designed to prepare students for entry-level employment in a social service setting or to transfer as a junior to a baccalaureate degree program in Social Work. This degree is for the person who has a strong desire to help people who traditionally have been underrepresented within the larger society and require interventions and assistance in increasing control of their personal destinies. These introductory courses will give the student a good fundamental working knowledge of the social services system.

The program offers course work leading to a certificate of achievement and an associate in science degree in Human Services: Pre-Social Work. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Demonstrate a fundamental working knowledge of the social services system.
2. Be prepared for entry-level employment in a social service setting.
3. Understand who are the underrepresented within our society and what might be appropriate interventions to assist them.
4. Apply the multiple perspectives of a broad Liberal Arts foundation to their analysis of social problems.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 12</td>
<td>Computer Literacy, or</td>
<td>3</td>
</tr>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications, or</td>
<td></td>
</tr>
<tr>
<td>BT 1</td>
<td>Computer Document Processing I, or</td>
<td></td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3-4</td>
</tr>
<tr>
<td>HS/SOC 10</td>
<td>Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 19A</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 24</td>
<td>Fundamentals of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 30</td>
<td>Group and Community Social Services</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18-19</strong></td>
</tr>
</tbody>
</table>

COURSE OPTIONS: Select 12 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>Introduction to African American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 2</td>
<td>African American Cultural Adaption</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>The American Indian in Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 25</td>
<td>Asian American Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>ASL 1</td>
<td>Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>CHDEV 5</td>
<td>Parent Education</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community, or</td>
<td></td>
</tr>
<tr>
<td>SOC 31</td>
<td>Child in Society: A Social Problems</td>
<td></td>
</tr>
<tr>
<td>CHDEV/PSY 38</td>
<td>Lifespan Development</td>
<td></td>
</tr>
<tr>
<td>CHDEV/PSY 39</td>
<td>Child Growth and Development</td>
<td></td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td></td>
</tr>
<tr>
<td>CLS 13</td>
<td>Politics and the Chicano-Latino Community</td>
<td></td>
</tr>
<tr>
<td>COMM 1</td>
<td>Introduction to Public Speaking, or</td>
<td></td>
</tr>
<tr>
<td>COMM 4</td>
<td>Persuasion, or</td>
<td></td>
</tr>
<tr>
<td>COMM 8</td>
<td>Group Communication</td>
<td></td>
</tr>
<tr>
<td>COMM 25</td>
<td>Argumentation, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 6</td>
<td>Symbolic Logic</td>
<td>3</td>
</tr>
<tr>
<td>ECON 25</td>
<td>Introduction to Economics, or</td>
<td></td>
</tr>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or Honors Introduction to Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or Honors Introduction to Macroeconomics</td>
<td></td>
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<tr>
<td>FN 35</td>
<td>Nutrition and Health, or</td>
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<tr>
<td>FN/WSTS 43</td>
<td>Women's Nutrition</td>
<td>2-3</td>
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<tr>
<td>HMONG 1</td>
<td>Beginning Hmong</td>
<td>5</td>
</tr>
<tr>
<td>HS/WSTS 25</td>
<td>Assertiveness Training</td>
<td></td>
</tr>
<tr>
<td>HS 44</td>
<td>Drug Use: Physical and Psychological Effects</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1A</td>
<td>Theories of Knowledge and Reality, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 1C</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>SOC/WSTS 5</td>
<td>Sociology of Rape</td>
<td>3</td>
</tr>
<tr>
<td>SOC/WSTS 7</td>
<td>Domestic Violence: Abuse Within the Family</td>
<td>3</td>
</tr>
<tr>
<td>SOC 32</td>
<td>Introduction to Marriage and Family</td>
<td></td>
</tr>
<tr>
<td>SPAN 1</td>
<td>Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: An associate in science degree will be awarded on the successful completion of 60 units. See page 35 for associate degree requirements. General education requirements for transfer certification are on page 47.

For career options, consult with Human Services staff.
PRE-SOCIAL WORK OPTION – FORMERLY SOCIAL WORK OPTION - MAJOR #7633

This certificate of achievement is designed to prepare students for entry-level employment in a social service setting or with additional general education courses, to transfer as a junior to a baccalaureate degree program in social work. This program is for the person who has a strong desire to help people who traditionally have been underrepresented within the larger society and require interventions and assistance in increasing control of their personal destinies. These introductory courses will give the student a good fundamental working knowledge of the social services system.

The certificate of achievement offers course work leading to a certificate of achievement in Human Services: Pre-Social Work Option. Students must take the required courses listed in the Core (see below), and select 12 units from the list of options.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate a fundamental working knowledge of the social services system.
2. Be prepared for entry-level employment in a social service setting.
3. Understand who are the underrepresented within our society and what might be appropriate interventions to assist them.
4. Apply the multiple perspectives of a broad liberal arts foundation to their analysis of social problems.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 12</td>
<td>Computer Literacy, or</td>
<td>3</td>
</tr>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications, or</td>
<td></td>
</tr>
<tr>
<td>BT 1</td>
<td>Computer Document Processing I, or</td>
<td></td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3-4</td>
</tr>
<tr>
<td>HS/SOC 10</td>
<td>Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 19A</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 24</td>
<td>Fundamentals of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 30</td>
<td>Group and Community Social Services</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18-19</strong></td>
</tr>
</tbody>
</table>

COURSE OPTIONS: Select 12 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>Introduction to African American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 2</td>
<td>African American Cultural Adaptation</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>The American Indian in Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 25</td>
<td>Asian American Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>ASL 1</td>
<td>Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>CHDEV 5</td>
<td>Parent Education</td>
<td></td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community, or</td>
<td></td>
</tr>
<tr>
<td>SOC 31</td>
<td>Child in Society</td>
<td></td>
</tr>
<tr>
<td>CHDEV/PSY 38</td>
<td>Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>CLS 13</td>
<td>Politics and the Chicano-Latino Community</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1</td>
<td>Introduction to Public Speaking, or</td>
<td></td>
</tr>
<tr>
<td>COMM 4</td>
<td>Persuasion, or</td>
<td></td>
</tr>
<tr>
<td>COMM 8</td>
<td>Group Communication</td>
<td></td>
</tr>
<tr>
<td>COMM 25</td>
<td>Argumentation, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 6</td>
<td>Symbolic Logic</td>
<td></td>
</tr>
<tr>
<td>ECON 25</td>
<td>Introduction to Economics, or</td>
<td></td>
</tr>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or</td>
<td></td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or</td>
<td></td>
</tr>
<tr>
<td>FN 35</td>
<td>Nutrition and Health, or</td>
<td></td>
</tr>
<tr>
<td>FN/WSTS 43</td>
<td>Women's Nutrition</td>
<td>2-3</td>
</tr>
<tr>
<td>HMONG 1</td>
<td>Beginning Hmong</td>
<td>5</td>
</tr>
<tr>
<td>HS/WSTS 25</td>
<td>Assertiveness Training</td>
<td>2</td>
</tr>
<tr>
<td>HS 44</td>
<td>Drug Use: Physical and Psychological Effects</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td>Introduction to Sociology, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC/WSTS 5</td>
<td>Sociology of Rape</td>
<td>3</td>
</tr>
<tr>
<td>SOC/WSTS 7</td>
<td>Domestic Violence: Abuse within the Family</td>
<td>3</td>
</tr>
<tr>
<td>SOC 32</td>
<td>Introduction to Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 1</td>
<td>Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

For career options, consult with Human Services staff.

INDUSTRIAL TECHNOLOGY

— FORMERLY INDUSTRIAL ARTS AND TECHNOLOGY

— MAJOR #8992

This degree is designed for students that have a desire to learn about the different subject areas within the Applied Technology Division. A student could also transfer to a four year university and earn a Bachelor of Science degree in Industrial Technology.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Create 3D solid models using various extrusion methods.
2. Create and modify files using Microsoft Office programs.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AT 11</td>
<td>Basic Electricity</td>
<td>3</td>
</tr>
<tr>
<td>CADD 16</td>
<td>3D Solid Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>WELD 1</td>
<td>Exploring Welding/Metals</td>
<td>3</td>
</tr>
</tbody>
</table>

2019-2020 Fresno City College Catalog
**JOURNALISM – MAJOR #5351**

The Journalism Major at Fresno City College is designed to introduce students to the mass media, both as consumers and as potential practitioners. The program focuses on the theory and practice of gathering, processing, and delivering news and that prepares individuals to be professional print journalists, news editors, and news managers. It includes instruction in news writing and editing; reporting; photojournalism; layout and graphic design; journalism law and policy; professional standards and ethics; and journalism history and criticism. All students are encouraged to meet with a counselor.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**
1. Demonstrate an understanding of journalistic responsibility.
2. Analyze the impact of mass media on American society and its diverse communities.
3. Describe how the major mass media operate and comprehend their contribution to American society and the world.
4. Write and edit news stories.
5. Meet journalistic deadlines.
6. Demonstrate the uses of photography, graphics, and newspaper layout in media productions.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN 1</td>
<td>Introduction to Mass Communication</td>
</tr>
<tr>
<td>JOURN 3</td>
<td>Newswriting</td>
</tr>
<tr>
<td>JOURN 16</td>
<td>Race, Gender, and the Media</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

**RECOMMENDED ELECTIVES (6 UNITS MINIMUM)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 9</td>
<td>Automotive Essentials</td>
</tr>
<tr>
<td>CADD 14</td>
<td>2D CAD I</td>
</tr>
<tr>
<td>CAM 5</td>
<td>CNC Operation &amp; Maintenance for</td>
</tr>
<tr>
<td>CAM 10</td>
<td>CNC Mill Programming &amp; Operation I</td>
</tr>
<tr>
<td>DRAFT 12</td>
<td>Drafting Practices</td>
</tr>
<tr>
<td>EST 51</td>
<td>Direct Current Fundamentals of</td>
</tr>
<tr>
<td>EST 52</td>
<td>Alternating Current Fundamentals</td>
</tr>
<tr>
<td>EST 53</td>
<td>Lab Safety Practices</td>
</tr>
<tr>
<td>EST 54</td>
<td>Integrated Devices</td>
</tr>
<tr>
<td>EST 55A</td>
<td>Digital Concepts</td>
</tr>
<tr>
<td>EST 56B</td>
<td>Motor Controls</td>
</tr>
<tr>
<td>EST 58</td>
<td>Programmable Logic Controllers</td>
</tr>
<tr>
<td>EST 59</td>
<td>Instrumentation Systems</td>
</tr>
<tr>
<td>EST 60</td>
<td>A+ PC Maintenance and Repair</td>
</tr>
<tr>
<td>EST 61</td>
<td>Networking Fundamentals</td>
</tr>
<tr>
<td>EST 62</td>
<td>Routing &amp; Switching Essentials</td>
</tr>
<tr>
<td>WELD 2A</td>
<td>Introduction to Welding Technology</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**DEPARTMENT PUBLICATION REQUIREMENT (Select six units or two courses):**

- JOURN 4: Writing for the College Newspaper
- JOURN 6: Magazine Production
- JOURN 11A: Beginning Media Writing Practicum
- JOURN 11B: Intermediate Media Writing Practicum
- JOURN 11C: Advanced Media Writing Practicum
- JOURN 11D: Editorial Leadership
- JOURN 12: Online Newspaper Staff

Complete a total of twelve (12) units from the courses listed below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 5</td>
<td>Art History Ancient to Medieval</td>
</tr>
<tr>
<td>GRC 41</td>
<td>Visual Communications</td>
</tr>
<tr>
<td>JOURN 2</td>
<td>Interpreting Current Events</td>
</tr>
<tr>
<td>JOURN 13</td>
<td>Advanced Reporting and Writing</td>
</tr>
<tr>
<td>JOURN 14</td>
<td>Multimedia Reporting</td>
</tr>
<tr>
<td>JOURN 15</td>
<td>Basic Editing for Journalists</td>
</tr>
<tr>
<td>JOURN 19</td>
<td>Work Experience</td>
</tr>
<tr>
<td>PHIL 1C</td>
<td>Ethics</td>
</tr>
<tr>
<td>PHOTO 30</td>
<td>Editorial Photography</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**JOURNALISM FOR TRANSFER – MAJOR #5355**

The Associate in Arts in Journalism for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the Associate in Arts in Journalism for Transfer degree, students must complete 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**
1. Demonstrate an understanding of journalistic responsibility.
2. Describe how the major mass media operate and analyze its tools in media productions.
3. Report, write and edit news stories for multimedia and meet journalistic deadlines.
## KINESIOLOGY

### KINESIOLOGY – MAJOR #4555

Kinesiology studies the function and performance of the human body though the sciences of anatomy, physiology, biomechanics, and psychology. With a diverse curriculum, students can choose from courses such as anatomy and physiology, health and wellness, nutrition, sports psychology, athletic training, and coaching. Students will be presented with both theoretical and practical applications of the science of kinesiology, as it pertains to exercise, sport, and physical activity. Coursework in this field is intended to improve students’ knowledge about health, fitness, and lifetime wellness as they relate to personal and community well-being. A degree in kinesiology has become a valuable asset in pursuing relevant and rewarding professional careers.

<table>
<thead>
<tr>
<th>CORE COURSES (3 courses or 9 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN 1 Introduction to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 3 Newswriting</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 11A Beginning Media Writing Practicum, or</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 4 Writing for the College Newspaper</td>
<td>3</td>
</tr>
<tr>
<td>LIST A - Select 3 units or 1 course from the following:</td>
<td>Units</td>
</tr>
<tr>
<td>JOURN 11B Intermediate Media Writing Practicum</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 11C Advanced Media Writing Practicum</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 11D Editorial Leadership</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 13 Advanced Reporting and Writing</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 14 Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 30 Editorial Photography</td>
<td>3</td>
</tr>
<tr>
<td>LIST B - Select 6-7 units or 2 courses from the following:</td>
<td>Units</td>
</tr>
<tr>
<td>COMM 1 Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 25 Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3/3H Critical Reading &amp; Writing, or Honors Critical Reading &amp; Writing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 16 Race, Gender and the Media</td>
<td>3</td>
</tr>
<tr>
<td>MATH/PSY 42 Statistics for the Behavioral Sciences, or</td>
<td>4</td>
</tr>
<tr>
<td>MATH 11 Elementary Statistics, or</td>
<td>3</td>
</tr>
<tr>
<td>DS 23 Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 6 Symbolic Logic</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2/2H American Government, or Honors American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note:** Students should avoid accumulating additional journalism units as they complete their AA-T degree (which requires 60 units). Additional units will create graduation problems at the upper division. Many programs require 80 units outside of journalism for the degree and each CSU may require up to 28 upper division units in the major.

### ASSOCIATE IN SCIENCE DEGREE

**Student Learning Outcomes:**

1. After completion of this program, the student will have the basic knowledge of the general foundation of kinesiology.

2. This course of study provides the student a background to pursue a career in the field of kinesiology.

#### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 5 Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 20 Human Anatomy, or BIOL 21A Human Anatomy &amp; Physiology I</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 22 Human Physiology, or BIOL 21B Human Anatomy &amp; Physiology II</td>
<td>5</td>
</tr>
<tr>
<td>FN 35 Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>FN 41 Sports Nutrition</td>
<td>2</td>
</tr>
<tr>
<td>PE 20 Athletic Training</td>
<td>4</td>
</tr>
<tr>
<td>PE 23 Lifeguard Training</td>
<td>3</td>
</tr>
<tr>
<td>PE 24 Sports Officiating</td>
<td>2</td>
</tr>
<tr>
<td>PE 26 Sports Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PE 28 Foundations of Coaching</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fitness/Wellness Activities:** Minimum of one course (1 unit)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANCE 9 Dance Conditioning</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 10A Beginning Modern Dance Technique</td>
<td>1</td>
</tr>
<tr>
<td>PE 6 Fitness and Health</td>
<td>1</td>
</tr>
<tr>
<td>PE 8 Basic Self Defense</td>
<td>1</td>
</tr>
<tr>
<td>PE 9 Circuit Training</td>
<td>1</td>
</tr>
<tr>
<td>PE 15A Weight Training (Women)</td>
<td>1</td>
</tr>
<tr>
<td>PE 15B Weight Training (Men)</td>
<td>1</td>
</tr>
<tr>
<td>PE 15C Weight Training (Coed)</td>
<td>1</td>
</tr>
<tr>
<td>PE 17 Hatha Yoga</td>
<td>1</td>
</tr>
<tr>
<td>PE 27 High-Intensity Cardio Interval Training</td>
<td>1</td>
</tr>
<tr>
<td>PE 29C Off-Season Conditioning for Badminton</td>
<td>1</td>
</tr>
<tr>
<td>PE 30C Off-Season Conditioning for Baseball</td>
<td>1</td>
</tr>
<tr>
<td>PE 31C Off-Season Conditioning for Basketball</td>
<td>1</td>
</tr>
<tr>
<td>PE 33C Off-Season Conditioning for Football</td>
<td>1</td>
</tr>
<tr>
<td>PE 34C Off-Season Conditioning for Golf</td>
<td>1</td>
</tr>
<tr>
<td>PE 36C Off-Season Conditioning for Soccer</td>
<td>1</td>
</tr>
<tr>
<td>PE 37C Off-Season Conditioning for Softball</td>
<td>1</td>
</tr>
<tr>
<td>PE 38C Off-Season Conditioning for Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 39C Off-Season Conditioning for Track and Field</td>
<td>1</td>
</tr>
<tr>
<td>PE 40C Off-Season Conditioning for Volleyball</td>
<td>1</td>
</tr>
<tr>
<td>PE 41C Off-Season Conditioning for Wrestling</td>
<td>1</td>
</tr>
<tr>
<td>PE 42C Off-Season Conditioning for Water Polo</td>
<td>1</td>
</tr>
</tbody>
</table>
KINESIOLOGY FOR TRANSFER – MAJOR #4555

An Associate in Arts in Kinesiology for Transfer is designed for students who plan to complete a bachelor's degree in Kinesiology at a CSU or UC campus. An Associate in Arts in Kinesiology prepares students to pursue studies in fields such as kinesiology/physical education credential programs, exercise science, athletic training/sports medicine, and sports administration. To earn the Associate in Arts in Kinesiology for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 22-23 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Recognize and evaluate the importance of a healthy and physically active lifestyle.
2. Identify the major systems of the human body as they relate to movement and activity by explaining and applying the principles of anatomy and physiology.

REQUIRED CORE COURSES: 15 units

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy, and</td>
<td></td>
</tr>
<tr>
<td>BIOL 22</td>
<td>Human Physiology, or</td>
<td></td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>Human Anatomy &amp; Physiology I, and</td>
<td></td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>9</td>
</tr>
<tr>
<td>HLTH 2</td>
<td>First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>PE 62</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
</tbody>
</table>

REQUIRED CORE COURSES: 3 units

Select a minimum of 3 different courses from the following for a total of 3 or more units.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 27</td>
<td>Archery</td>
<td>1</td>
</tr>
<tr>
<td>PE 35</td>
<td>Badminton</td>
<td>1</td>
</tr>
<tr>
<td>PE 13</td>
<td>Basketball</td>
<td>1</td>
</tr>
<tr>
<td>PE 12</td>
<td>Golf</td>
<td>1</td>
</tr>
<tr>
<td>PE 11</td>
<td>Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 15A</td>
<td>Weight Training (Women)</td>
<td>1</td>
</tr>
<tr>
<td>PE 15B</td>
<td>Weight Training (Men)</td>
<td>1</td>
</tr>
<tr>
<td>PE 15C</td>
<td>Weight Training (Coed)</td>
<td>1</td>
</tr>
<tr>
<td>PE 17</td>
<td>Hatha Yoga</td>
<td>1</td>
</tr>
</tbody>
</table>

ELECTIVES: 4 units

Select a minimum of 1 course from the following for a total of 4 or more units.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2A</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 22-23
PRE-LAW IN INTERDISCIPLINARY STUDIES

MAJOR #8710

The Interdisciplinary Pre-Law degree is designed to provide students with the background and skills necessary to succeed in pre-law programs at 4-year institutions, and law schools. Students in this program will develop the reading comprehension, written communication, research, and critical reasoning skills that will help them excel in the legal field. In addition, students will gain an understanding and appreciation of historical, political, social, and economic issues related to law. The courses in the program fit the general education requirements for the Associate’s Degree, as well as California State University and University of California transfer. Students enrolled in the pathway to law school program are encouraged to pursue the Interdisciplinary Pre-Law degree.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate independent and critical thinking regarding important topics in law.
2. Conduct research and effectively write about historical, social, political, and economic issues related to law.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 11</td>
<td>Law and Democracy</td>
<td>3</td>
</tr>
<tr>
<td>BA 18</td>
<td>Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>COMM 4</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Reading and Composition</td>
<td>4</td>
</tr>
<tr>
<td>HIST 12</td>
<td>History of the United States since 1877</td>
<td>3</td>
</tr>
<tr>
<td>MATH 42</td>
<td>Statistics for the Behavioral Sciences</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 1B</td>
<td>Social and Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1C</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2</td>
<td>Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 6</td>
<td>Symbolic Logic</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 13</td>
<td>Legal and Judicial Reasoning</td>
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Select two courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HIST 21</td>
<td>United States Civil War</td>
<td>3</td>
</tr>
<tr>
<td>HIST/WSTS 22</td>
<td>History of American Women</td>
<td>3</td>
</tr>
<tr>
<td>HIST 25</td>
<td>History of Religion in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST/AFRAM 34</td>
<td>History of the American Civil Rights Movement</td>
<td>3</td>
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Recommended for GE pattern:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AFRAM 3</td>
<td>African-American Art</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 1</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 7</td>
<td>Physical Geography: Earth’s Surface</td>
<td>4</td>
</tr>
<tr>
<td>LITEC 61</td>
<td>Information and Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Physical Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>

Suggested sequence of courses:

First Semester (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Reading and Composition</td>
<td>4</td>
</tr>
<tr>
<td>HIST 12</td>
<td>History of the United States since 1877</td>
<td>3</td>
</tr>
<tr>
<td>LITEC 61</td>
<td>Information and Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Course</td>
<td></td>
<td>1</td>
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</tbody>
</table>

Second Semester (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BA 18</td>
<td>Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>COMM 4</td>
<td>Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>HIST 21</td>
<td>United States Civil War, or</td>
<td></td>
</tr>
<tr>
<td>HIST/WSTS 22</td>
<td>History of American Women</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2</td>
<td>Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Third Semester (Fall)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 25</td>
<td>History of Religion in the United States, or</td>
<td></td>
</tr>
<tr>
<td>HIST/AFRAM 34</td>
<td>History of the American Civil Rights Movement</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Course</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Fourth Semester (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 3</td>
<td>African-American Art</td>
<td>3</td>
</tr>
<tr>
<td>AMST 11</td>
<td>Law and Democracy</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 1</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 7</td>
<td>Physical Geography: Earth’s Surface</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 1B</td>
<td>Social and Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2</td>
<td>Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 66

LIBERAL ARTS

ASSOCIATE OF ARTS LIBERAL ARTS DEGREE WITH AREAS OF EMPHASIS

The associate in arts (A.A.) degree in Liberal Arts Degree is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an “Area of Emphasis”. The associate in arts in Liberal Arts Degree would be an ideal choice for those students planning on transferring to the California State University or University of California as the student can satisfy their general education requirements, plus focus on transferable course work that relates to majors at CSU or UC.

Choose either Option I or II or III for the General Education Pattern related to your educational goal.

Complete the required number of units in one “Area of Emphasis” from those outlined below.
For ALL OPTIONS: complete the necessary Fresno City College graduation requirements.
All classes listed below transfer to CSU. Refer to www.ASSIST.org for transfer details or see a counselor for additional details.

ASSOCIATE IN ARTS DEGREE: Students selecting this option must complete all of the required courses for Fresno City College AA/AS General Education Pattern. This option may not adequately prepare the student for transfer to a 4-year institution.

CSU/GE: Students intending to transfer to a CSU should complete this option. Students selecting this option must complete all of the required courses for CSU GE Certification.

IGETC: Students who intend to transfer to a UC should complete this option. Students selecting this option must complete all of the required courses for IGETC Certification.

AREAS OF EMPHASIS:
Choose one of the following “Area of Emphasis”:
American Sign Language
Anthropology/Criminology
Anthropology/Economics/Geography
Asian Languages
Cultural Studies
Foreign Languages
History/Political Science
Romance Languages
Social Sciences
Sociology
Spanish

Complete the minimum number of units required in the “Area of Emphasis”.
For All Options: complete the necessary Fresno City College Graduation and Competency requirements.
Electives may be necessary to total 60 degree applicable units required for the associate degree.

LIBERAL ARTS WITH AN EMPHASIS IN AMERICAN SIGN LANGUAGE - MAJOR #5101

This program is designed to acquaint students with ASL and with an understanding of the culture and history of the people who use the Language.

It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary sign language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Students will acquire and demonstrate signing, skills at the intermediate-advanced level of the target language consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using American Sign Language.

3. Students will acquire and demonstrate skills necessary to analyze, compare and contrast cultures and practices between Deaf and hearing cultures.
4. Students will demonstrate familiarity with technologies allowing them to access sources in the following areas: current news from the target language, bibliographical and other sources related to coursework, contemporary culture sources, and interactive communication sites.

Minimum of 22 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 1</td>
<td>Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 2</td>
<td>High-Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 3</td>
<td>Intermediate American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 4</td>
<td>High-Intermediate American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>ASL 5</td>
<td>Deaf Culture</td>
<td>3</td>
</tr>
<tr>
<td>ASL 6</td>
<td>Structure of American Sign Language</td>
<td>3</td>
</tr>
<tr>
<td>ASL 7</td>
<td>Deaf History</td>
<td>3</td>
</tr>
<tr>
<td>ASL 8</td>
<td>American Sign Language/Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18

*Note:
1. Two of the following courses may be challenged according to Foreign Language Department policy: ASL 1, 2.
2. An associate in arts degree in Liberal Arts with an emphasis in American Sign Language will be awarded to students who successfully complete a total of 60 units, which include the associate degree requirements and a minimum of 18 units of core course work listed above. Students seeking an associate degree may apply for an evaluation after they have completed 30-40 units and are within one year of graduation.

LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ANTHROPOLOGY/CRIMINOLOGY - MAJOR #5106

This program is designed to provide students with a foundation in the social science disciplines related to forensic investigation. The program offers students an introduction to the intersection between the study of humans and their physical remains and the legal contexts of such analyses. This area of emphasis will be an ideal choice for students planning to transfer to the California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors at the specific college/university of his/her choice. With this emphasis students could major in either of the two disciplines at their transfer institution. *Students are encouraged to review the lower division requirements at their planned transfer institution as a major in anthropology with a forensics emphasis may require courses in other disciplines such as mathematics, chemistry and biology.
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
Upon completion of the Associates in Arts with an Emphasis in Criminology/Anthropology students will:
1. Be academically prepared to transfer to a four-year college.
2. Have a basic level of knowledge of the process of identification and classification of skeletonized human remains.
3. Have basic skills in criminal investigation and crime scene processing.
4. Have developed skills in critical thinking.
5. Have developed skills in critical thinking.

Select 19 units from the following sections:

Required Course: Units
ANTHRO 1  Biological Anthropology ........................................... 3
ANTHRO 2/2H  Cultural Anthropology, or Honors Cultural Anthropology ............... 3
ANTHRO 4  Introduction to Archaeology ........................................ 3
ANTHRO 15  Laboratory Methods in Archaeology ......................... 4
ANTHRO 16A  Field Archaeology I .................................................. 2
ANTHRO 16B  Field Archaeology II ............................................... 2
ANTHRO 24  Doing Archaeology: Hands-On! ............................... 1.5

Required Criminology Courses:
CRIM 1  Introduction to Criminology ............................................ 3
CRIM 8  Criminal Investigation ..................................................... 4
CRIM 9  Crime Scene Forensic Evidence ...................................... 3

Total 10

*Highly recommended for students wanting to pursue forensic anthropology.

LIBERAL ARTS DEGREE WITH AN EMPHASIS IN ANTHROPOLOGY/ECONOMICS/GEOGRAPHY – MAJOR #5107

This program is designed to acquaint students with the diversity of human culture, the environments in which cultures exist, the patterns of resource use that they practice, and the effects of modern economic practices and globalization on the peoples of the world. This area of emphasis will be an ideal choice for students planning to transfer to the University of California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors at the specific college/university of his/her choice. With this emphasis students could major in any of the three disciplines or other majors at various transfer institutions that focus on international/global issues.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
Upon completion of the AA with an Emphasis in Anthropology/Economics/Geography students will:
1. Be academically prepared to transfer to a four-year college.
2. Be prepared to enter the workforce and society with the skills and knowledge needed to effectively interact with people from other cultures.
3. Have an awareness of the rich cultural and geographic diversity of the world.
4. Have the ability to apply economic concepts to understand the effects of globalization on world cultures.
5. Have developed skills in critical thinking.

Select six units from the following Anthropology courses:
ANTHRO 1  Introduction to Archaeology ........................................ 3
ANTHRO 2/2H  Cultural Anthropology, or Honors Cultural Anthropology ............... 3
ANTHRO 3  Archaeology and World Prehistory, or
ANTHRO 4  Introduction to Archaeology ........................................ 3
ANTHRO 8  Language and Culture .................................................. 3
ANTHRO 13  Anthropology of Magic, Witchcraft, and Religion ......................... 3
ANTHRO/CLS 28  Ancient Mexico ..................................................... 3
ECON 40/40H  Introduction to Microeconomics, or Honors Introduction to Microeconomics .................................................. 3
ECON 50/50H  Introduction to Macroeconomics, or Honors Introduction to Macroeconomics .................................................. 3
GEOG 2  Cultural Geography ......................................................... 3
GEOG 4A  World Geography .......................................................... 3
GEOG 4B  World Geography .......................................................... 3
GEOG 20  Geography in California ................................................ 3

LIBERAL ARTS DEGREE WITH AN EMPHASIS IN CULTURAL STUDIES – MAJOR #5121

This program is designed to acquaint students with the diversity of cultures, particularly within American society. The program offers a broad foundation for the study of cultures as well as classes specific to various ethnic cultures within the United States.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
Upon completion of the Associates in Arts with an Emphasis in Cultural Studies students will:
1. Be academically prepared to transfer to a four-year college.
2. Be prepared to enter the workforce and society with a cultural awareness that facilitates consideration of different cultures and cultural norms.
3. Have an understanding of the rich cultural diversity of the United States.
4. Have developed skills in critical thinking.
18 units from any of the following (but no more than 6 units from each discipline)  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>CLS 12</td>
<td>Mexican American History</td>
<td>3</td>
</tr>
<tr>
<td>CLS 13</td>
<td>Politics and the Chicano-Latino Community</td>
<td>3</td>
</tr>
<tr>
<td>CLS/SOC 14</td>
<td>Sociology of the Mexican American Community</td>
<td>3</td>
</tr>
<tr>
<td>CLS/WSTS 24</td>
<td>La Chicana and Latina</td>
<td>3</td>
</tr>
<tr>
<td>CLS/HIST 29</td>
<td>History of Mexico, Colonial to Contemporary Period</td>
<td>3</td>
</tr>
<tr>
<td>CLS 30</td>
<td>Migration and the Family: Social and Psychological Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 15</td>
<td>Diversity and Culture in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2</td>
<td>Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4A</td>
<td>World Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4B</td>
<td>World Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 20</td>
<td>Geography in California</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 24</td>
<td>International Relations</td>
<td>3</td>
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<tr>
<td>SOC 1B</td>
<td>Critical Thinking about Social Problems</td>
<td>3</td>
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<tr>
<td>SOC 2</td>
<td>American Minority Groups</td>
<td>3</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIBERAL ARTS DEGREE WITH AN EMPHASIS IN FOREIGN LANGUAGES - MAJOR #5134**

This program is designed to acquaint students with foreign languages and with an understanding of the culture and history of the people who speak them. The study of foreign languages encourages students to examine assumptions they have uncritically accepted before their college experience. Students with substantial foreign language fluency who combine their language skills with a solid foundation in liberal education will find fulfilling occupations.

It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**

1. Students will demonstrate listening, speaking, reading, and writing skills at the intermediate-advanced level of the target language consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using language.
3. Students will demonstrate skills necessary to analyze and compare and contrast cultures and practices of the target language with their own culture.
4. Students will demonstrate familiarity with technologies allowing them to access sources in the following areas: current news from the target country, bibliographical and other sources related to coursework, contemporary culture sources, and interactive communication sites.

Minimum of 20 units in at least two foreign languages

Choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMEN 2</td>
<td>High-Beginning Armenian</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 2</td>
<td>High-Beginning Chinese</td>
<td>5</td>
</tr>
<tr>
<td>FRENCH 2</td>
<td>High-Beginning French</td>
<td>5</td>
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<tr>
<td>FRENCH 3</td>
<td>Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>GERMAN 2</td>
<td>High-Beginning German</td>
<td>5</td>
</tr>
<tr>
<td>HMONG 2</td>
<td>High-Beginning Hmong</td>
<td>5</td>
</tr>
<tr>
<td>JAPAN 2</td>
<td>High-Beginning Japanese</td>
<td>5</td>
</tr>
<tr>
<td>PORT 2</td>
<td>High-Beginning Portuguese</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 2</td>
<td>High-Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 2NS</td>
<td>Preparatory Spanish for Native Speakers</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 3NS</td>
<td>Spanish for Spanish Speakers</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>High-Intermediate Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 4NS</td>
<td>Spanish for Spanish Speakers</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 5</td>
<td>The Short Story: Mexico, Spain, and the U.S.</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 6</td>
<td>The Short Story: Latin America</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 7</td>
<td>Advanced Spanish: Composition and Grammar</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 8</td>
<td>Advanced Spanish Conversation</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 9</td>
<td>Spanish Business and Culture</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 41</td>
<td>Introduction to Poetry in Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 42</td>
<td>Hispanic American Culture</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>
LIBERAL ARTS DEGREE WITH AN EMPHASIS IN HISTORY/POLITICAL SCIENCE – MAJOR #5141

This program is designed to acquaint students with the methodologies of history and political science and to increase their awareness of the foundations of social, cultural, and political aspects of modern society.

ASSOCIATE OF ARTS DEGREE

Student Learning Outcomes:

Upon completion of the AA with an Emphasis in History/Political Science, students will:

1. Be familiar with and be able to analyze the foundations of modern institutions.
2. Be familiar with and be able to analyze the political process.
3. Be familiar with the cultural diversity of society and be able to gauge its significance in politics and history.

18 Units with 9 units from each discipline:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1/1H</td>
<td>Western Civilization to 1648, or</td>
<td></td>
</tr>
<tr>
<td>HIST 2/2H</td>
<td>Western Civilization since 1648, or</td>
<td></td>
</tr>
<tr>
<td>HIST 3</td>
<td>History of Ancient Rome</td>
<td></td>
</tr>
<tr>
<td>HIST 11</td>
<td>History of the United States to 1877</td>
<td></td>
</tr>
<tr>
<td>HIST 12/12H</td>
<td>History of the United States since 1877, or</td>
<td></td>
</tr>
<tr>
<td>HIST 15</td>
<td>History of the British Isles</td>
<td></td>
</tr>
<tr>
<td>HIST 17</td>
<td>History of the Muslim World to 1405</td>
<td></td>
</tr>
<tr>
<td>HIST 18</td>
<td>History of Ancient Greece</td>
<td></td>
</tr>
<tr>
<td>HIST 20</td>
<td>World History I, to 1600</td>
<td></td>
</tr>
<tr>
<td>HIST 21</td>
<td>United States Civil War</td>
<td></td>
</tr>
<tr>
<td>HIST 22/WSTS 22</td>
<td>History of American Women</td>
<td></td>
</tr>
<tr>
<td>HIST 23</td>
<td>World History II, since 1500</td>
<td></td>
</tr>
<tr>
<td>HIST 25</td>
<td>History of Religion in the United States</td>
<td></td>
</tr>
<tr>
<td>HIST/CLS 29</td>
<td>History of Mexico, Colonial to Contemporary Period</td>
<td></td>
</tr>
<tr>
<td>HIST 30</td>
<td>California History</td>
<td></td>
</tr>
<tr>
<td>HIST 34/AFRAM 34</td>
<td>History of the American Civil Rights</td>
<td></td>
</tr>
<tr>
<td>POLSCI 1</td>
<td>Modern Politics</td>
<td></td>
</tr>
<tr>
<td>POLSCI 2/2H</td>
<td>American Government, or</td>
<td></td>
</tr>
<tr>
<td>POLSCI 5</td>
<td>Comparative Government</td>
<td></td>
</tr>
<tr>
<td>POLSCI 13</td>
<td>Legal and Judicial Reasoning</td>
<td></td>
</tr>
<tr>
<td>POLSCI 24</td>
<td>International Relations</td>
<td></td>
</tr>
<tr>
<td>POLSCI 25</td>
<td>Model United Nations</td>
<td></td>
</tr>
</tbody>
</table>

LIBERAL ARTS DEGREE WITH AN EMPHASIS IN SOCIAL SCIENCES – MAJOR #5176

A program designed to acquaint the students with the diversity of subjects in the Social Sciences. The Social Sciences offer a broad study in human behavior. This area of emphasis will be an ideal choice for students planning to transfer to the California State University or University of California as students can satisfy their general education requirements, plus focus on transferable course work that relates to majors in liberal arts or liberal studies at CSU or UC. Each student should consult with a counselor for specific information regarding intended majors at the specific college/university of his/her choice.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

Upon completion of the AA with an Emphasis in Social Sciences students will:

1. Be academically prepared to transfer to a four-year college.
2. Be prepared to analyze the influence of culture, economics, family, and society on individual development.
3. Identify the consequences of bias on social interactions.
4. Have developed skills in critical thinking.

18 units of core courses from any of the following courses (but no more than 6 units in one discipline):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>Introduction to African American Studies</td>
<td></td>
</tr>
<tr>
<td>AFRAM 3</td>
<td>African-American Art</td>
<td></td>
</tr>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
<td></td>
</tr>
<tr>
<td>AMIND 32</td>
<td>American Indian History</td>
<td></td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or</td>
<td></td>
</tr>
<tr>
<td>ANTHRO 3</td>
<td>Archaeology and World Prehistory</td>
<td></td>
</tr>
<tr>
<td>ANTHRO 13</td>
<td>Anthropology of Magic, Witchcraft, and Religion</td>
<td></td>
</tr>
<tr>
<td>ASAMER 1</td>
<td>Indo-Chinese Americans</td>
<td></td>
</tr>
<tr>
<td>ASAMER 15</td>
<td>Introduction to Asian-Americans</td>
<td></td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
<td></td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td></td>
</tr>
<tr>
<td>CLS 12</td>
<td>Mexican American History</td>
<td></td>
</tr>
<tr>
<td>CHDEV 39/PSY 39</td>
<td>Child Growth and Development</td>
<td></td>
</tr>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or</td>
<td></td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or</td>
<td></td>
</tr>
<tr>
<td>GEOG 2</td>
<td>Cultural Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 4A</td>
<td>World Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 4B</td>
<td>World Geography</td>
<td></td>
</tr>
<tr>
<td>HIST 1/1H</td>
<td>Western Civilization to 1648, or</td>
<td></td>
</tr>
<tr>
<td>HIST 2/2H</td>
<td>Western Civilization since 1648</td>
<td></td>
</tr>
<tr>
<td>HIST 11</td>
<td>History of the United States to 1877</td>
<td></td>
</tr>
<tr>
<td>HIST 20</td>
<td>World History I, to 1600</td>
<td></td>
</tr>
<tr>
<td>HIST 21</td>
<td>United States Civil War</td>
<td></td>
</tr>
<tr>
<td>HIST 22/WSTS 22</td>
<td>History of American Women</td>
<td></td>
</tr>
<tr>
<td>HIST 23</td>
<td>World History II, since 1500</td>
<td></td>
</tr>
<tr>
<td>HIST 25</td>
<td>History of Religion in the United States</td>
<td></td>
</tr>
<tr>
<td>HIST/CLS 29</td>
<td>History of Mexico, Colonial to Contemporary Period</td>
<td></td>
</tr>
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<td>HIST 30</td>
<td>California History</td>
<td></td>
</tr>
<tr>
<td>HIST 34/AFRAM 34</td>
<td>History of the American Civil Rights</td>
<td></td>
</tr>
<tr>
<td>POLSCI 1</td>
<td>Modern Politics</td>
<td></td>
</tr>
<tr>
<td>POLSCI 2/2H</td>
<td>American Government, or</td>
<td></td>
</tr>
<tr>
<td>POLSCI 5</td>
<td>Comparative Government</td>
<td></td>
</tr>
<tr>
<td>POLSCI 13</td>
<td>Legal and Judicial Reasoning</td>
<td></td>
</tr>
</tbody>
</table>
LIBERAL ARTS DEGREE WITH AN EMPHASIS IN SPANISH - MAJOR #5183

This program is designed to acquaint students with the Spanish language and with an understanding of the culture and history of the people who speak it. The study of foreign languages encourages students to examine assumptions they have uncritically accepted before their college experience. Students with substantial foreign language fluency who combine their language skills with a solid foundation in liberal education will find fulfilling occupations. It will also encourage them to appreciate the complexities of the multicultural society in which they live. Students will acquire the necessary language skills to succeed in everyday life experiences, vocational programs, and university transfer courses.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Students will demonstrate listening, speaking, reading, and writing skills at the intermediate-advanced level of the target language consistent with national standards for foreign language education.
2. Students will show evidence of the acquisition and application of grammatical structures when using language.

3. Students will demonstrate skills necessary to analyze and compare and contrast cultures and practices of the target language with their own culture.
4. Students will demonstrate familiarity with technologies allowing them to access sources in the following areas: current news from the target country, bibliographical and other sources related to coursework, contemporary culture sources, and interactive communication sites.

Select 15 units from the following courses:

Non-native speakers

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 2</td>
<td>High-Beginning Spanish, or</td>
</tr>
<tr>
<td>SPAN 2NS</td>
<td>Preparatory Spanish for Spanish Speakers</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish, or</td>
</tr>
<tr>
<td>SPAN 3NS</td>
<td>Intermediate Spanish for Spanish Speakers</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>High-Intermediate Spanish, or</td>
</tr>
<tr>
<td>SPAN 4NS</td>
<td>High-Intermediate Spanish for Spanish Speakers</td>
</tr>
</tbody>
</table>

8 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 5</td>
<td>The Short Story: Mexico, Spain, and the U.S.</td>
</tr>
<tr>
<td>SPAN 6</td>
<td>The Short Story: Latin America.</td>
</tr>
<tr>
<td>SPAN 7</td>
<td>Advanced Spanish: Composition and Grammar</td>
</tr>
<tr>
<td>SPAN 8</td>
<td>Advanced Spanish Conversation</td>
</tr>
<tr>
<td>SPAN 9</td>
<td>Spanish Business and Culture</td>
</tr>
<tr>
<td>SPAN 41</td>
<td>Introduction to Poetry in Spanish</td>
</tr>
<tr>
<td>SPAN 42</td>
<td>Hispanic American Culture</td>
</tr>
</tbody>
</table>

Total 23

Note: Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

LIBRARY TECHNOLOGY

LIBRARY TECHNOLOGY – MAJOR #5171

Program prepares students to work as a paraprofessional in a variety of libraries.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Apply basic knowledge of library principles and practices to a specific library setting.
2. Perform skills associated with the technical service functions in libraries.
3. Use skills associated with the delivery of public services currently in use in libraries.
4. Analyze the purpose of the paraprofessional in all types of libraries.
LIBRARY TECHNOLOGY – MAJOR #5171

Certificate of Achievement prepares students to work as a paraprofessional in a variety of libraries.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Apply basic knowledge of library principles and practices to a specific library setting.
2. Perform skills associated with the technical service functions in libraries.
3. Use skills associated with the delivery of public services currently in use in libraries.
4. Analyze the purpose of the paraprofessional in all types of libraries.

REQUIRED COURSE WORK

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITEC 51</td>
<td>Introduction to Library Services</td>
<td>3</td>
</tr>
<tr>
<td>LITEC 52A</td>
<td>Organization of Information</td>
<td>3</td>
</tr>
<tr>
<td>LITEC 52B</td>
<td>Collection Management</td>
<td>1</td>
</tr>
<tr>
<td>LITEC 55</td>
<td>Library Public Service</td>
<td>3</td>
</tr>
<tr>
<td>LITEC 56</td>
<td>Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>LITEC 57</td>
<td>Reference: Print and Online Sources</td>
<td>3</td>
</tr>
<tr>
<td>LITEC 61</td>
<td>Information and Computer Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITEC 54</td>
<td>Literature and Services for Youth</td>
<td>3</td>
</tr>
<tr>
<td>LITEC 62</td>
<td>Medical Resources and Libraries</td>
<td>2</td>
</tr>
<tr>
<td>LITEC 63</td>
<td>Legal Resources and Libraries</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 21-22

Note: Requires completion of the minimum (21-22 units). Additionally requires completion of the associate degree requirements found in the Fresno City College Catalog. Students seeking an associate degree may apply for an evaluation at Admissions and Records after they have completed 30-40 units and are within a year of graduation.

MANUFACTURING TECHNICIAN

– MAJOR #8061

This curriculum provides training in maintenance mechanic, electrical control systems, and principles of industrial refrigeration (ammonia) systems.

CERTIFICATE

Student Learning Outcomes:
1. Demonstrate satisfactory knowledge of pneumatic/hydraulic systems.
2. Demonstrate satisfactory knowledge of oxyacetylene and arc welding processes, and use of common hand tools.
4. Write programs in ladder logic, load and troubleshoot the programs, and operate the system.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units/Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC 353</td>
<td>Principles of Industrial Refrigeration</td>
<td>52 Hours</td>
</tr>
<tr>
<td>EST 50</td>
<td>Introduction to Electronics</td>
<td>3 Units</td>
</tr>
<tr>
<td>EST 55A</td>
<td>Digital Concepts</td>
<td>3 Units</td>
</tr>
<tr>
<td>EST 58</td>
<td>Programmable Logic Controllers</td>
<td>3 Units</td>
</tr>
<tr>
<td>EST 59</td>
<td>Instrumentation Systems</td>
<td>3 Units</td>
</tr>
<tr>
<td>MMCTC 370</td>
<td>Fundamentals of Welding and Machine Shop</td>
<td>300 Hours</td>
</tr>
<tr>
<td>MMCTC 371</td>
<td>Fundamentals of Hydraulics and Pneumatics</td>
<td>300 Hours</td>
</tr>
<tr>
<td>MMCTC 372</td>
<td>Electrical Fundamentals</td>
<td>300 Hours</td>
</tr>
</tbody>
</table>

MARKETING

MARKETING – MAJOR #2110

This curriculum is designed for students planning to enter the marketing fields of retailing, wholesaling, general selling, and advertising.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Develop and implement a marketing plan in response to market opportunities.
2. Assess and apply technology to appropriate marketing activities.
3. Design, write, and execute a promotional plan including the formulation of selling strategies.
4. Apply effective leadership skills while managing marketing functions within a business enterprise.

FIRST YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 11</td>
<td>Selling and Sales Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Associate Degree Requirements

Total 16
MARKETING – MAJOR #2110

This curriculum is designed for students planning to enter the marketing fields of retailing, wholesaling, general selling, and advertising/promotion.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Develop and implement a marketing plan in response to market opportunities.
2. Assess and apply technology to appropriate marketing activities.
3. Design and execute a promotional plan including the formulation of selling strategies.
4. Apply effective leadership skills while managing marketing functions within a business enterprise.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 33</td>
<td>3</td>
</tr>
<tr>
<td>CIT 12</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 11</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 12</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 14</td>
<td>2</td>
</tr>
<tr>
<td>MKTG 19</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 21</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 26

ADVERTISING – MAJOR #2113

A step incentive certificate signifying proficiency in advertising and sales promotion.

CERTIFICATE

Student Learning Outcomes:
1. Describe each element in the promotion mix.
2. Identify appropriate media for various promotional situations.
3. Develop and implement a marketing media plan in response to market opportunities.
4. Formulate promotion and selling strategies.
5. Display soft skills required for workplace success including teambuilding, conflict management, communication, and professional behavior.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 10</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 12</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 21</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 9

FASHION MERCHANDISING - MAJOR #2152

A step incentive signifying proficiency for entry-level fashion merchandising positions.

CERTIFICATE

Student Learning Outcomes:
1. Apply knowledge and understanding of key elements of the fashion industry to the areas of entry-level fashion merchandising.
2. Demonstrate an understanding and application of appropriate design and merchandising concepts through the creation of a visual display.
3. Demonstrate a strategic understanding of all elements of the retailing mix through application of retailing case studies/scenarios.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 14</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 17</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 22</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 9

* Requirements and units will be waived if knowledge and skill in the subject matter can be demonstrated.
MARKETING, FASHION MERCHANDISING
- MAJOR #2152

This degree prepares students for employment in the field of Fashion Merchandising.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcome:
1. Prepares students for a wide variety of careers related to marketing, management, buying, and selling of fashion goods.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>ART 3</td>
<td>Two-Dimensional Design</td>
</tr>
<tr>
<td>ECON 40</td>
<td>Introduction to Microeconomics</td>
</tr>
<tr>
<td>FM 26</td>
<td>Apparel and Textiles</td>
</tr>
<tr>
<td>FM 27</td>
<td>Introduction to Fashion Merchandising</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES (CHOOSE ONE)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
</tr>
<tr>
<td>DS 21</td>
<td>Finite Mathematics</td>
</tr>
</tbody>
</table>

Total: 19

RECOMMENDED SEQUENCE

First Year – First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3</td>
<td>Two-Dimensional Design</td>
</tr>
</tbody>
</table>

First Year – Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 40</td>
<td>Introduction to Microeconomics</td>
</tr>
</tbody>
</table>

Second Year – First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>FM 27</td>
<td>Introduction to Fashion Merchandising</td>
</tr>
</tbody>
</table>

Second Year – Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM 26</td>
<td>Apparel and Textiles</td>
</tr>
</tbody>
</table>

Notes:
1. An AS degree will be awarded to any Fashion Merchandising certificate candidate who successfully completes a total of 60 units. The 60 units must include associate degree requirements and 23 units of course work in the major as listed above.
2. Associate degree requirements are listed on page 35.
3. General Education requirements for transfer certification are on page 47.

MARKETING, FASHION MERCHANDISING
- MAJOR #2152

This certificate prepares students for employment in the field of Fashion Merchandising.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:
1. Integrate the elements of fashion design into the marketing and entrepreneurial concepts of retailing, merchandising, promotion, and personal sales.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 7</td>
<td>Beginning Drawing</td>
</tr>
<tr>
<td>BA 51</td>
<td>Business Planning and New Venture Launch</td>
</tr>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>MKTG 11</td>
<td>Selling and Sales Management</td>
</tr>
<tr>
<td>MKTG 12</td>
<td>Advertising and Promotion</td>
</tr>
<tr>
<td>MKTG 14</td>
<td>Retailing</td>
</tr>
<tr>
<td>MKTG 17</td>
<td>Visual Merchandising</td>
</tr>
<tr>
<td>MKTG 21</td>
<td>Digital Marketing</td>
</tr>
<tr>
<td>MKTG 22</td>
<td>Introduction to Fashion Merchandising</td>
</tr>
<tr>
<td>TA 36</td>
<td>Costume Design</td>
</tr>
</tbody>
</table>

Total: 25.5

Students are required to establish eligibility for English 125 and 126 or ESL 67 and 68.

MARKETING, RETAIL MANAGEMENT
- MAJOR #2055

The program prepares current and future retail employees for the fast paced, ever changing challenges in a competitive retail environment. The program is designed to meet the needs of the retail industry and is endorsed by leading retailers across the nation, including partner companies of the Western Association of Food Chains.

ASSOCIATE IN SCIENCE DEGREE AND

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Analyze a current marketing situation to identify retail opportunities.
2. Demonstrate effective leadership skills while managing marketing functions within a business enterprise.
3. Describe and identify appropriate application of finance and budgeting activities related to retail management.
4. Identify and describe the types of retailers and appropriate distribution methods for each type of retail situation.
5. Display soft skills required in a retail environment including customer service, teambuilding, time management, conflict management, communication, and professional behavior.
### Personal Sales – Major #2114

A step incentive certificate signifying proficiency in personal sales.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Identify marketing-related opportunities.
2. Design and execute a sales promotion plan.
3. Identify and describe the principles of personal sales promotion and appropriate applications in various sales situations.
4. Display soft skills required for workplace success including team building, conflict management, communication, and professional behavior.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 33</td>
<td>Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BT 131</td>
<td>Applied Accounting, or Financial Accounting</td>
<td>3.5-4</td>
</tr>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 14</td>
<td>Retailing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**Note:** Students qualify for the certificate of achievement upon completion of the major requirements listed above. In addition, those completing the associate degree requirements on page 35 of the catalog, upon application, will be awarded the associate in science degree.

### Retailing – Major #2116

A step incentive certificate signifying proficiency in entry-level retailing skills.

**CERTIFICATE**

**Student Learning Outcomes:**
1. Develop and implement a marketing plan in response to market opportunities.
2. Apply effective leadership skills while managing marketing functions within a business enterprise.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 33</td>
<td>Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 11</td>
<td>Selling and Sales Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

### Mathematics for Transfer - Formerly Mathematics – Major #6250

The Associate in Science in Mathematics for Transfer is designed to prepare students for further study in mathematics or in the sciences at the university level. It is also intend to provide students with a solid mathematics background in preparation for graduate level study or research in most majors. The Associate in Science in Mathematics for Transfer is specifically designed for students who plan to complete a bachelor's degree in mathematics at a CSU campus. To earn the Associate in Science in Mathematics for Transfer, students must complete 60 required semester units of CSU-transferable coursework, CSU-GE Breath or IGETC requirements and 20-21 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

### Associate in Science Degree

**Student Learning Outcomes:**
1. Students will solve application problems in the natural sciences, management sciences, and social sciences using sound mathematical principles.
2. Students will demonstrate algebraic proficiency when using the concepts taught in each course to solve multi-step problems.
3. Students will use limits, derivatives, and integrals to calculate rates of change and infinite sums.
### MEDICAL ASSISTANT–CLINICIAN

**– MAJOR #2120**

This curriculum is designed for the student who desires employment and advancement in the medical facility assisting the physician with the diagnosis and treatment of the patient. Medical Assisting is an entry level career in the medical field.

**Admission Policy**

Enrollment is limited in the Medical Assistant–Clinician Program. There are no restrictions as to age, race, sex or marital status. In order to qualify for admission to the program, the applicant must have met all of the following conditions:

1. Graduated from high school or complete the General Educational Development (GED) test with an average score of 45.
2. Completed Math 260D or test score that would qualify the student to place out of or above Math 260D.
3. Completed an Academic Summary Form for the Medical Assistant–Clinician Program and be prepared to furnish transcripts when requested.
4. Have no physical impairment that would preclude the performance of all Medical Assistant–Clinician duties. After selection as a qualified student to the Medical Assistant–Clinician Program, the student must submit evidence of physical examination with no limitations by a licensed physician.
5. Students are enrolled into the program in cohorts per semester.
6. Background checks may be required dependent on clinical placement in MA 19 work experience. A negative result may impact ability to complete program.

### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 5A</td>
<td>5</td>
</tr>
<tr>
<td>MATH 5B</td>
<td>4</td>
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<tr>
<td>MATH 6</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

**GROUP A:** Select a minimum of seven units from Groups A & B with at least three units from Group A.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 7</td>
<td>4</td>
</tr>
<tr>
<td>MATH 26</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
</tr>
</tbody>
</table>

**GROUP B:** Select a minimum of four units from Group B if less than seven units in Group A were selected.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 40</td>
<td>4</td>
</tr>
<tr>
<td>MATH 11</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11H</td>
<td>4</td>
</tr>
<tr>
<td>MATH 42</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4A</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

### ASSOCIATE IN SCIENCE DEGREE

**Student Learning Outcomes:**

1. Identify common medical conditions and diseases.
2. Perform clinical skills commonly associated in the physician's office.

### REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 5</td>
<td>4</td>
</tr>
<tr>
<td>BT 23</td>
<td>3</td>
</tr>
<tr>
<td>CIT 15</td>
<td>3</td>
</tr>
<tr>
<td>FN 40</td>
<td>3</td>
</tr>
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<td>HIT 10</td>
<td>3</td>
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<tr>
<td>HS 24</td>
<td>3</td>
</tr>
<tr>
<td>MA 1</td>
<td>2</td>
</tr>
<tr>
<td>MA 2</td>
<td>3</td>
</tr>
<tr>
<td>MA 4</td>
<td>3</td>
</tr>
<tr>
<td>MA 5</td>
<td>3</td>
</tr>
<tr>
<td>MA 6A</td>
<td>3</td>
</tr>
<tr>
<td>MA 6B</td>
<td>3</td>
</tr>
<tr>
<td>MA 19</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
</tr>
</tbody>
</table>

*Note: Requires additional general education units for two-year Associate in Science degree*

**MEDICAL ASSISTANT–CLINICIAN**

**– MAJOR #2121**

This curriculum is designed for the student who desires employment and advancement in the medical facility assisting the physician with the diagnosis and treatment of the patient. Medical Assisting is an entry level career in the medical field. ADMISSION POLICY Enrollment is limited in the Medical Assistant–Clinician Program. There are no restrictions as to age, race, sex or marital status. In order to qualify for admission to the program, the applicant must have met all of the following conditions:

1. Graduated from high school or complete the General Educational Development (GED) test with an average score of 45.
2. Completed Math 260D or test score that would qualify the student to place out of or above Math 260D.
3. Completed an Academic Summary Form for the Medical Assistant–Clinician Program and be prepared to furnish transcripts when requested.
4. Have no physical impairment that would preclude the performance of all Medical Assistant–Clinician duties. After selection as a qualified student to the Medical Assistant–Clinician Program, the student must submit evidence of physical examination by a licensed physician.
5. Students are enrolled into the program in cohorts per semester.
MUSIC

MUSIC FOR TRANSFER – MAJOR #5805

The Associate in Arts in Music for Transfer degree is intended for students who plan to complete a Bachelor's degree in music studies at a CSU campus. Students completing the transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transferring to earn a bachelor's degree. The Associate in Arts in Music for Transfer degree may not be the best option for students intending to transfer to a particular CSU campus or a university that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Perform music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Ability to distinguish historical musical styles while interpreting appropriate conducting patterns.

REQUIRED CORE COURSES

MUS 1A  Music Theory I  3
MUS 1B  Music Theory II  3
MUS 2A  Music Theory III  3

Two Units of Intermediate/Advanced class requirement to be selected from the following:

MUS 22  Intermediate/Advanced Piano  1
MUS 26  Intermediate/Advanced Voice  1
MUS 29  Intermediate/Advanced Guitar  1
MUS 42A  Intermediate/Advanced Brass (Brass Choir)  1
MUS 42B  Intermediate/Advanced Woodwinds (Woodwind Choir)  1
MUS 42C  Intermediate/Advanced Strings (String Orchestra)  1
MUS 42D  Intermediate/Advanced Percussion (Percussion Ensemble)  1

For the Large Ensemble requirement, all music majors select four units from the following:

MUS 30  College Choir  1
MUS 34  Fresno Chorale  1
MUS 40  Concert Band  1
MUS 41  Jazz Ensemble  1
MUS 46  Symphony Orchestra  1
MUS 60  Symphonic Choir  1
MUS 68  Symphonic Band  1
MUS 70  Contemporary Jazz Ensemble  1
MUS 71  Lab Jazz Ensemble  1
MUS 76  College Philharmonic Orchestra  1

This program satisfies the requirements for the Associate in Arts Degree with a major in music and the lower division course requirements at most California State Universities.

Music majors must select one of the following areas of specialization: instrumental (woodwind, brass, percussion, or strings), vocal, guitar, piano, or commercial music.

Instrumental, vocal, guitar, and piano majors must take Music 1A, 1B, 2A, 2B, 7A, 7B, 7C, 7D, 13, and 18. These majors must also take the appropriate Intermediate/Advanced class and participate in a Large Ensemble every semester they are enrolled in the Music Major.

INSTRUMENTAL MAJORS - MAJOR #5810

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Perform music on the instrument of choice from at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.
REQUIRED CORE COURSES

MUS 1A  Music Theory I ........................................... 3
MUS 1B  Music Theory II ......................................... 3
MUS 2A  Music Theory III ......................................... 3
MUS 2B  Music Theory IV ......................................... 3
MUS 7A  Ear Training: Level I .................................... 1
MUS 7B  Ear Training: Level II .................................... 1
MUS 7C  Ear Training: Level III ................................... 1
MUS 7D  Ear Training: Level IV ................................... 1
MUS 13  History of Music .......................................... 3
MUS 18  Basic Conducting and Score Reading .............. 2

Total 21

Student Learning Outcomes:

1. Distinguish historical musical styles while using appropriate conducting patterns.
2. Hear, analyze, read, and write music.
3. Perform vocal music of at least three different time periods.

VOCAL MAJORS - MAJOR #5820

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Perform vocal music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

REQUIRED CORE COURSES

MUS 1A  Music Theory I ........................................... 3
MUS 1B  Music Theory II ......................................... 3
MUS 2A  Music Theory III ......................................... 3
MUS 2B  Music Theory IV ......................................... 3
MUS 7A  Ear Training: Level I .................................... 1
MUS 7B  Ear Training: Level II .................................... 1
MUS 7C  Ear Training: Level III ................................... 1
MUS 7D  Ear Training: Level IV ................................... 1
MUS 13  History of Music .......................................... 3
MUS 18  Basic Conducting and Score Reading .............. 2

Total 21

Eight units of Intermediate/Advanced class requirement: Units

MUS 26  Intermediate/Advanced Voice .......................... 1-2

Select eight units of Large Ensemble from the following:

Units

MUS 30  College Choir ............................................. 1-2
MUS 34  Fresno Chorale ........................................... 1-2
MUS 39  Opera and Musical Theatre Workshop ............ 2
MUS 39A Opera Workshop - Baroque/Classical ............. 2
MUS 39B Opera Workshop - Romantic Period .............. 2
MUS 39C Classical Musical Opera .............................. 2
MUS 38D Contemporary Opera and Musical Theatre .... 2
MUS 60  Symphonic Choir ....................................... 2

GUITAR MAJORS - MAJOR #5830

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Perform guitar music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

REQUIRED CORE COURSES

MUS 1A  Music Theory I ........................................... 3
MUS 1B  Music Theory II ......................................... 3
MUS 2A  Music Theory III ......................................... 3
MUS 2B  Music Theory IV ......................................... 3
MUS 7A  Ear Training: Level I .................................... 1
MUS 7B  Ear Training: Level II .................................... 1
MUS 7C  Ear Training: Level III ................................... 1
MUS 7D  Ear Training: Level IV ................................... 1
MUS 13  History of Music .......................................... 3
MUS 18  Basic Conducting and Score Reading .............. 2

Total 21

Eight units of INT/ADV class requirement: Units

MUS 29  Intermediate/Advanced Guitar .......................... 1-2

For the Large Ensemble requirement, all guitar majors select eight units from the following:

Units

MUS 30  College Choir ............................................. 2
MUS 34  Fresno Chorale ........................................... 2
MUS 40  Concert Band .............................................. 2
MUS 41  Jazz Ensemble .............................................. 2
MUS 46  Symphony Orchestra .................................... 1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop .... 2
MUS 47B Jazz Combo: Cool and Mainstream ............... 2
MUS 47C Jazz Combo: Modern and Fusion .................. 2
MUS 47D Jazz Combo: World Music ........................... 2
MUS 48  Latin Jazz Ensemble ..................................... 2
MUS 53  Latin Jazz Workshop ..................................... 2
MUS 54  Afro-Latin Ensemble ..................................... 2
MUS 55  Afro-Caribbean Ensemble ............................. 2
PIANO MAJORS - MAJOR #5840

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Perform piano music of at least three different time periods.
2. Hear, analyze, read, and write music.
3. Distinguish historical musical styles while using appropriate conducting patterns.

REQUIRED CORE COURSES Units
MUS 1A Music Theory I .................................. 3
MUS 1B Music Theory II .................................. 3
MUS 2A Music Theory III .................................. 3
MUS 2B Music Theory IV .................................. 3
MUS 7A Ear Training: Level I ............................... 1
MUS 7B Ear Training: Level II ............................... 1
MUS 7C Ear Training: Level III .............................. 1
MUS 7D Ear Training: Level IV .............................. 1
MUS 13 History of Music................................. 3
MUS 18 Basic Conducting and Score Reading .......... 2
Total 21

Eight units of INT/ADV class requirement:
MUS 22 Intermediate/Advanced Piano .................. 1-2

For the Large Ensemble requirement, all piano majors select eight units from the following:
MUS 30 College Choir .................................. 2
MUS 34 Fresno Chorale .................................. 2
MUS 40 Concert Band .................................. 2
MUS 41 Jazz Ensemble .................................. 2
MUS 46 Symphony Orchestra .......................... 1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop .... 2
MUS 47B Jazz Combo: Cool and Mainstream ......... 2
MUS 47C Jazz Combo: Modern and Fusion ............ 2
MUS 47D Jazz Combo: World Music .................... 2
MUS 48 Latin Jazz Ensemble ............................ 2
MUS 53 Latin Jazz Workshop ............................ 2
MUS 54 Afro-Latin Ensemble ............................. 2
MUS 55 Afro-Caribbean Ensemble ....................... 2
MUS 60 Symphonic Choir ................................ 2
MUS 68 Symphonic Band ................................ 2
MUS 70 Contemporary Jazz Ensemble .................. 2
MUS 71 Lab Jazz Ensemble ................................ 2
MUS 72 Jazz Composer’s Orchestra ....................... 2
MUS 76 College Philharmonic Orchestra ............... 1-2
MUS 90 Jazz Composers Workshop ..................... 2
MUS 91 Jazz Composers Ensemble ....................... 2
MUS 92 Vocal Jazz Ensemble ............................. 2

BRASS PERFORMANCE – MAJOR #5811

The Brass Performance Certificate Program ensures that the brass music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

CERTIFICATE

Student Learning Outcomes:
1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
MUS 3 Music Fundamentals, or
MUS 1A Music Theory I .................................. 3
MUS 12 Music Appreciation, or
MUS 13 History of Music .................................. 3
Total 6

Select four units of Intermediate/Advanced from the following:
MUS 42A Intermediate/Advanced Brass (Brass Choir) .................. 1-2

Select four units of Large Ensemble from the following:
MUS 40 Concert Band .................................. 2
MUS 46 Symphony Orchestra .......................... 2
MUS 68 Symphonic Band ................................ 2
MUS 76 College Philharmonic Orchestra ............... 2

GUITAR PERFORMANCE – MAJOR #5831

The Guitar Performance Certificate Program ensures that the guitar music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

CERTIFICATE

Student Learning Outcomes:
1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
MUS 3 Music Fundamentals, or
MUS 1A Music Theory I .................................. 3
MUS 12 Music Appreciation, or
MUS 13 History of Music .................................. 3
MUS 29 Intermediate/Advanced Guitar .................. 4
Total 10
Select four units of Large Ensemble from the following: Units
MUS 30  College Choir .............................................. 1-2
MUS 35  City Singers .................................................. 2
MUS 39  Opera and Musical Theatre Workshop ............... 2
MUS 39A Opera Workshop – Baroque/Classical ............... 2
MUS 39B Opera Workshop: Romantic Period ................. 2
MUS 39C Classic Musical Theatre ............................... 2
MUS 39D Contemporary Opera and Musical Theatre ...... 2
MUS 40  Concert Band ............................................... 2
MUS 41  Jazz Ensemble .............................................. 1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop ...... 2
MUS 47B Jazz Combo: Cool and Mainstream ................. 2
MUS 47C Jazz Combo: Modern and Fusion .................... 2
MUS 47D Jazz Combo: World Music ............................ 2
MUS 48  Latin Jazz Ensemble ........................................ 2
MUS 53  Latin Jazz Workshop ...................................... 2
MUS 54  Afro-Latin Ensemble ...................................... 2
MUS 55  Afro-Caribbean Ensemble ............................... 2
MUS 60  Symphonic Choir .......................................... 1-2
MUS 68  Symphonic Band ........................................... 1-2
MUS 70  Contemporary Jazz Ensemble ......................... 1-2
MUS 71  Lab Jazz Ensemble ........................................ 1-2
MUS 92  Vocal Jazz Ensemble ...................................... 2

MUSIC THEORY – MAJOR #5860

The Music Theory Certificate Program ensures completion of the undergraduate music theory requirements necessary for the AA degree in Music and/or transfer to CSU, UC and some other public and private universities.

CERTIFICATE

Student Learning Outcomes:
1. Compose and analyze chord progressions of the common practice period
2. Analyze music scores for harmonic and formal structures of different historical, geographical, and cultural areas.
3. Write critically, synthesizing ideas and concepts about music while using correct terminology following attendance of a live music concert.

REQUIRED CORE COURSES Units
MUS 1A  Music Theory I .............................................. 3
MUS 1B  Music Theory II ............................................ 3
MUS 2A  Music Theory III ........................................... 3
MUS 2B  Music Theory IV ............................................ 3
Total 12

PERCUSSION PERFORMANCE – MAJOR #5813

The Percussion Performance Certificate Program ensures that the percussion music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

CERTIFICATE

Student Learning Outcomes:
1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES Units
MUS 3  Music Fundamentals, or
MUS 1A  Music Theory I .............................................. 3
MUS 12  Music Appreciation, or
MUS 13  History of Music ............................................ 3
Total 6
Select four units of Intermediate/Advanced from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 42D</td>
<td>Intermediate/Advanced Brass</td>
</tr>
<tr>
<td></td>
<td>(Percussion Ensemble) ......... 1-2</td>
</tr>
</tbody>
</table>

Select four units of Large Ensemble from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 40</td>
<td>Concert Band ............ 2</td>
</tr>
<tr>
<td>MUS 46</td>
<td>Symphony Orchestra .... 2</td>
</tr>
<tr>
<td>MUS 68</td>
<td>Symphonic Band ....... 2</td>
</tr>
<tr>
<td>MUS 76</td>
<td>College Philharmonic Orchestra .... 2</td>
</tr>
</tbody>
</table>

PIANO PERFORMANCE – MAJOR #5841

The Piano Performance Certificate Program ensures that the piano music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

CERTIFICATE

Student Learning Outcomes:
1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 3</td>
<td>Music Fundamentals, or</td>
</tr>
<tr>
<td>MUS 1A</td>
<td>Music Theory I ............ 3</td>
</tr>
<tr>
<td>MUS 12</td>
<td>Music Appreciation, or</td>
</tr>
<tr>
<td>MUS 13</td>
<td>History of Music ............ 3</td>
</tr>
<tr>
<td>MUS 22</td>
<td>Intermediate/Advanced Piano .... 4</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
</tr>
</tbody>
</table>

Select four units of Intermediate/Advanced from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 42C</td>
<td>Intermediate/Advanced Brass</td>
</tr>
<tr>
<td></td>
<td>(String Orchestra) ......... 1-2</td>
</tr>
</tbody>
</table>

Select four units of Large Ensemble from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 46</td>
<td>Symphony Orchestra .... 2</td>
</tr>
<tr>
<td>MUS 76</td>
<td>College Philharmonic Orchestra .... 1-2</td>
</tr>
</tbody>
</table>

VOCAL PERFORMANCE – MAJOR #5821

The Vocal Performance Certificate Program ensures that the vocal music major has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

CERTIFICATE

Student Learning Outcomes:
1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 3</td>
<td>Music Fundamentals, or</td>
</tr>
<tr>
<td>MUS 1A</td>
<td>Music Theory I ............ 3</td>
</tr>
<tr>
<td>MUS 12</td>
<td>Music Appreciation, or</td>
</tr>
<tr>
<td>MUS 13</td>
<td>History of Music ............ 3</td>
</tr>
<tr>
<td>MUS 26</td>
<td>Intermediate/Advanced Guitar .... 4</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
</tr>
</tbody>
</table>
Elect four units of Large Ensemble from the following: Units
MUS 30 College Choir .................................................. 1-2
MUS 35 City Singers .................................................... 2
MUS 39A Opera Workshop - Baroque/Classical ................. 2
MUS 39B Opera Workshop: Romantic Period .................... 2
MUS 39C Classic Musical Theatre .................................. 2
MUS 39D Contemporary Opera and Musical Theatre .......... 2
MUS 60 Symphonic Choir ............................................ 1-2
MUS 92 Vocal Jazz Ensemble ....................................... 2

WOODWIND PERFORMANCE – MAJOR #5815

The Woodwind Performance Certificate Program ensures that the instrumental music major (woodwinds) has the fundamental academic preparation necessary for continued pursuit of the AA in Music or transfer to the university level.

CERTIFICATE

Student Learning Outcomes:
1. Perform solo pieces of intermediate level.
2. Perform in large and small ensembles in performance situations.
3. Compose music, hear music analytically and analyze a musical score.

REQUIRED CORE COURSES

Units
MUS 3 Music Fundamentals, or
MUS 1A Music Theory I ............................................. 3
MUS 12 Music Appreciation, or
MUS 13 History of Music .......................................... 3
Total 6

Select four units of Intermediate/Advanced from the following:

Units
MUS 42B Intermediate/Advanced Brass
(Woodwind Choir) ................................................. 1-2

Select four units of Large Ensemble from the following:

Units
MUS 40 Concert Band ................................................. 2
MUS 46 Symphony Orchestra ..................................... 2
MUS 68 Symphonic Band .......................................... 2
MUS 76 College Philharmonic Orchestra ......................... 2

COMMERCIAL MUSIC – MAJOR #5850

This program satisfies the music course requirements for the associate of science degree in commercial music and satisfies the requirements for the associate of science degree with a major in commercial music or music industry and the lower division course requirements at California state universities. The commercial music major must take MUS 3 or MUS 1A, 7A, MUS 24, MUS 20, MUS 21, MUS 17, MUS 8, MUS 111, MUS 112, MUS 5. Commercial Music majors must also take at least four units of Large Ensemble and 3 units of Music Electives.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Utilize current music technology to create, notate, and record music.
2. Distinguish the fundamentals of form, theory, history, and performance as it relates to commercial music.
3. Correctly describe the development and current structure of the music industry as it applies to a career in commercial music.

REQUIRED CORE COURSES

Units
MUS 3 or Music Fundamentals, or
MUS 1A Music Theory I ............................................. 3
MUS 5 Computer Music Production ................................ 3
MUS 7A Ear Training: Level I ....................................... 1
MUS 8 Audio Engineering ............................................ 3
MUS 17 History of Rock ............................................. 3
**MUS 20 Beginning Piano: Level I ................................ 2
**MUS 21 Beginning Piano: Level II .............................. 2
*MUS 24 Beginning Voice: Level I ................................. 2
MUS 111 The Music Business ....................................... 3
MUS 112 Introduction to Finale .................................... 2
Total 24

For the Large Ensemble requirement select four units from the following:

Units
MUS 30 College Choir .............................................. 2
MUS 34 Fresno Chorale .............................................. 2
MUS 40 Concert Band ................................................ 2
MUS 41 Jazz Ensemble .............................................. 2
MUS 46 Symphony Orchestra .................................... 1-2
MUS 47A Jazz Combo: New Orleans, Swing and Bop ....... 2
MUS 47B Jazz Combo: Cool and Mainstream ................. 2
MUS 47C Jazz Combo: Modern and Fusion ..................... 2
MUS 47D Jazz Combo: World Music ............................ 2
MUS 48 Latin Jazz Ensemble ...................................... 2
MUS 53 Latin Jazz Workshop ...................................... 2
MUS 54 Afro-Latin Ensemble ...................................... 2
MUS 55 Afro-Caribbean Ensemble ............................... 2
MUS 60 Symphonic Choir .......................................... 2
MUS 68 Symphonic Band ........................................... 2
MUS 70 Contemporary Jazz Ensemble ......................... 2
MUS 71 Lab Jazz Ensemble ........................................ 2
MUS 72 Jazz Composer’s Orchestra ............................. 2
MUS 76 College Philharmonic Orchestra ....................... 1-2
MUS 90 Jazz Composers Workshop ............................ 2
MUS 91 Jazz Composers Ensemble .............................. 2
MUS 92 Vocal Jazz Ensemble .................................... 2
For the Music Electives requirement, Commercial Music majors select from the following (3 units if not used previously): Units

MUS 1A    Music Theory I ...................................... 3
MUS 1B    Music Theory II ..................................... 3
MUS 2A    Music Theory III .................................... 3
MUS 2B    Music Theory IV ..................................... 3
MUS 3    Music Fundamentals ................................... 3
MUS 4    Jazz Theory ............................................ 3
MUS 6    Jazz Arranging and Composition ..................... 3
MUS 7B    Ear Training: Level II ......................... 1-2
MUS 9    Composition ........................................... 2
MUS 10A   Beginning Jazz Improvisation ..................... 2
MUS 10B   Intermediate/Advanced Jazz Improvisation ...... 2
MUS 12    Music Appreciation .................................. 3
MUS 13    History of Music ..................................... 3
MUS 16    Jazz History and Appreciation .................... 3
MUS 18    Basic Conducting and Score Reading ............. 2
MUS 22    Intermediate/Advanced Piano ..................... 1-2
MUS 25    Beginning Voice: Level II ......................... 2
MUS 26    Intermediate/Advanced Voice ..................... 1-2
MUS 27    Beginning Guitar: Level I ......................... 2
MUS 28    Beginning Guitar: Level II ......................... 2
MUS 29    Intermediate/Advanced Guitar .................... 1-2
MUS 30    College Choir ........................................ 2
MUS 34    Fresno Chorale ....................................... 2
MUS 35    City Singers .......................................... 2
MUS 40    Concert Band ......................................... 2
MUS 41    Jazz Ensemble ........................................ 2
MUS 42A   Intermediate/Advanced Brass (Brass Choir) ...... 1-2
MUS 42B   Intermediate/Advanced Woodwinds (Woodwind Choir) ........................................... 1-2
MUS 42C   Intermediate/Advanced Strings (String Orchestra) ......................... 1-2
MUS 42D   Intermediate/Advanced Percussion (Percussion Ensemble) ......................... 1-2
MUS 46    Symphony Orchestra ................................ 2
MUS 48    Latin Jazz Ensemble ................................ 2
MUS 49    Advanced Large Ensembles ......................... 1
MUS 57    Solo Repertoire Studies I ............................ 1
MUS 59    Advanced Chamber Ensembles ..................... 1
MUS 60    Symphonic Choir ..................................... 2
MUS 63    Chamber Singers ..................................... 2
MUS 68    Symphonic Band ...................................... 2
MUS 70    Contemporary Jazz Ensemble ....................... 2
MUS 71    Lab Jazz Ensemble ................................... 2
MUS 72    Jazz Composer’s Orchestra ......................... 2
MUS 74A   Intermediate/Advanced Brass Performance Practices ........................................... 1-2
MUS 74B   Intermediate/Advanced Woodwind Performance Practices ........................................... 1-2
MUS 74C   Intermediate/Advanced String Performance Practices ........................................... 1-2
MUS 74D   Intermediate/Advanced Percussion Performance Practices ........................................... 1-2
MUS 76    College Philharmonic Orchestra .................. 2
MUS 90    Jazz Composers Workshop ......................... 2
MUS 91    Jazz Composers Ensemble ......................... 2
MUS 92    Vocal Jazz Ensemble ................................. 2

Notes: *MUS 25 or 26 may be substituted.
**MUS 21 or 22 may be substituted.
***MUS 22 may be substituted.

COMMERCIAL MUSIC – MAJOR #5850

This program satisfies the requirements for the Certificate of Achievement in Commercial Music and the lower division requirements at California state universities. Music majors must select one of the following areas of specialization: instrumental, vocal, guitar, piano, or commercial music. Commercial music majors must take MUS 3 or MUS 1A, 5, 8, 20, 111, and 112.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Analyze, read, and write music.
2. Perform early intermediate level piano solos, duets and ensembles in an artistic manner using good technique with stylistic and aesthetic considerations.
3. Appropriately work with music industry professionals.
4. Record musicians in a professional manner.
5. Successfully manipulate Midi and Finale software.

REQUIRED CORE COURSE

Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 3</td>
<td>Music Fundamentals, or MUS 1A</td>
<td>3</td>
</tr>
<tr>
<td>MUS 5</td>
<td>Computer Music Production</td>
<td>3</td>
</tr>
<tr>
<td>MUS 8</td>
<td>Audio Engineering</td>
<td>3</td>
</tr>
<tr>
<td>*MUS 20</td>
<td>Beginning Piano Level I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 111</td>
<td>The Music Business</td>
<td>3</td>
</tr>
<tr>
<td>MUS 112</td>
<td>Introduction to Finale</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 16

*MUS 21 or 22 may be substituted
NURSING, REGISTERED – MAJOR #4520

The profession of registered nursing involves the provision of health care services, both direct and indirect, that focus on the maintenance, promotion and restoration of health. This includes basic health care to help people cope with difficulties in daily living that are associated with actual or potential problems of health, illness or the treatment thereof. Nursing is a dynamic problem-solving profession that focuses on the response of the individual to health problems. The practice of registered nursing requires a substantial amount of scientific knowledge and technical skills as well as leadership and managerial abilities. Students attend classes on the Fresno City College campus. Nursing experience is provided in selected local hospitals and health agencies.

Application Requirements

Enrollment in the Registered Nursing Program is limited. Minimum qualifications for selection must be met. There are no restrictions as to age, race, sex or marital status. Prior to the final date for filing an application to the program, the applicant must have:

1. Graduated from high school with a minimum grade point average of "C+" (2.5) or better in high school work or completed the General Educational Development (GED) test with an average standard score of 45.
2. Completed Chemistry 3A or equivalent with a grade of "C" or better.
3. Completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, (or Biology 21A and 21B, Human Anatomy and Physiology) with a grade of "C" or better in each course.
4. Completed Biology 31, Microbiology, with a grade of "C" or better.
5. Completed Sociology 1A, Introduction to Sociology, or Anthropology 2, Cultural Anthropology, and Psychology 2, General Psychology, with grades of "C" or better in each course.
6. Completed English 1A, Reading and Composition, with a grade of "C" or better.
7. Completed Mathematics 103, Intermediate Algebra, or a more advanced math course with a grade of "C" or better.
8. Attained a cumulative grade point average (GPA) of "C+" (2.5) or better in completed college work.
9. Completed an Academic Summary Form for the Registered Nursing Program and be prepared to furnish transcripts when requested to do so.
10. No physical impairment that would preclude the performance of all registered nurse duties.
11. Good physical and mental health.
12. Pass the Test of Essential Academic Skills (TEAS) with an overall score of 62% or better. The TEAS may only be taken twice with a minimum of 90 days between the attempts.

Notes:

1. The college GPA and college courses of an applicant will have precedence over an applicant's high school GPA and courses.
2. Prior to registration for the semester in which the applicant is scheduled to take courses in the Registered Nursing Program, the student must submit evidence of physical examination, current immunizations, and freedom of TB by a licensed physician. The student is also required to attend a mandatory orientation meeting before the start of the semester.
3. Students are required to complete a background check.

Change of Name, Address, and/or Telephone Number

Applicants and nursing students must keep the Nursing Education Office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Nursing Education Office of changes may result in loss of entry into the program.

Vocational Nursing Articulation

Procedures and application requirements specific to vocational nurse articulation into the Registered Nursing Program are available upon request.

Previous Education in Nursing

Any person desiring to enter the Fresno City College Registered Nursing Program by transfer or challenge will be evaluated on an individual basis after all college general requirements for transfer or challenge have been met. The college has written policies and procedures for academic training in registered nursing programs. Individuals who have completed vocational nursing programs and persons having other education in the field of nursing should contact the Director of Nursing for specific information.

Prenursing Preparation

Prenursing students planning to transfer to four-year programs in other schools should consult the catalog of the transfer school.

Academic Requirements

All program entry requirement courses listed above must be completed with a grade of "C" or better. In order to be eligible to apply for licensure as a Registered Nurse and to take the National Council Licensure Examination - RN, all other courses leading to the associate degree must also be completed with a grade of "C" or better. Students in the nursing program must earn a "C" grade or better (or a "Pass" grade when applicable) in all required nursing courses. Less than a "C" or a "Pass" grade in any required nursing course necessitates repeating the course before continuing with the major. Registered Nursing courses must be repeated in their entirety. Course repeatability and failure policy will be followed as outlined in the Registered Nursing Student Handbook.

If, based on the professional judgment of the faculty, a student demonstrates that he/she is unsuited to nursing, is not progressing satisfactorily or is engaged in unethical, unprofessional, or illegal practices, he/she may be asked to withdraw from the program.
State License

The successful completion of the prescribed registered nursing course sequence in addition to the other licensure and/or degree requirements qualifies the graduate for an associate in science degree and eligibility to apply for licensure as a Registered Nurse.

ASSOCIATE IN SCIENCE DEGREE

Registered Nursing Course Sequence (All courses must be completed with a grade of “C” or better.)

Student Learning Outcomes:

1. Students completing the Registered Nursing Program will be prepared to practice at a novice level as a professional nurse in the roles of caregiver, decision maker, communicator, professional, advocate, teacher, and manager as measured by 85% passing the NCLEX-RN on the first attempt.
2. At the completion of the Registered Nursing Program students will be able to coordinate nursing care for groups of clients by applying the nursing process to successfully modify care for critical and acute care clients.

**FIRST YEAR**

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 31 Foundations and Introduction to Medical-Surgical Nursing</td>
<td>4</td>
</tr>
<tr>
<td>RN 32 Foundations and Introduction to Medical-Surgical Nursing Clinical</td>
<td>2</td>
</tr>
<tr>
<td>RN 32A Foundations and Introduction to Medical-Surgical Nursing Skills</td>
<td>2</td>
</tr>
<tr>
<td>RN 33 Transcultural Health Care</td>
<td>1</td>
</tr>
<tr>
<td>RN 35A Pharmacology A: Introduction to Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 35B Pharmacology B: Nursing Pharmacological Applications</td>
<td>2</td>
</tr>
<tr>
<td>RN 41 Nursing Care of the Adult with Common Health Problems</td>
<td>2.5</td>
</tr>
<tr>
<td>RN 42 Nursing Care of the Adult with Common Health Problems Clinical</td>
<td>2</td>
</tr>
<tr>
<td>RN 42A Nursing Care of the Adult with Common Health Problems Skills</td>
<td>2</td>
</tr>
<tr>
<td>RN 45 Nursing Care of the Childbearing Family Theory</td>
<td>2.5</td>
</tr>
<tr>
<td>RN 46 Nursing Care of the Childbearing Family Clinical</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11.5</strong></td>
</tr>
</tbody>
</table>

**SECOND YEAR**

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 51 Nursing Care of the Adult with Complex Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>RN 52 Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical</td>
<td>2</td>
</tr>
<tr>
<td>RN 52A Nursing Care of the Adult and Older Adult with Complex Health Problems Skills</td>
<td>0.5</td>
</tr>
<tr>
<td>RN 53 Nursing Care of the Older Adult</td>
<td>1</td>
</tr>
<tr>
<td>RN 55 Nursing Care of Infants &amp; Children</td>
<td>2</td>
</tr>
<tr>
<td>RN 56 Nursing Care of Infants &amp; Children Clinical</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10.5</strong></td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 61 Nursing Care of the Critically Ill Adult and Coordinator of Care</td>
<td>2.5</td>
</tr>
<tr>
<td>RN 62 Nursing Care of the Critically Ill Adult and Coordinator of Care Clinical</td>
<td>3.5</td>
</tr>
<tr>
<td>RN 62A Nursing Care of the Critically Ill Adult Skills</td>
<td>0.5</td>
</tr>
<tr>
<td>RN 65 Nursing Care of the Client with Behavioral and Emotional Disorders</td>
<td>2</td>
</tr>
<tr>
<td>RN 66 Nursing Care of the Client with Behavioral and Emotional Disorders Clinical</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>10.5</strong></td>
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</table>

**LVN TO RN UPGRADE**

Prior to Entering Third Semester Fresno City College Nursing Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>RN 101 Transition to Fresno City College Registered Nursing Program</td>
<td>1.5</td>
</tr>
<tr>
<td>RN 102 Transition to Fresno City College Registered Nursing Program Skills</td>
<td>1-2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2.5-3.5</strong></td>
</tr>
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</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 51 Nursing Care of the Adult with Complex Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>RN 52 Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical</td>
<td>2</td>
</tr>
<tr>
<td>RN 52A Nursing Care of the Adult and Older Adult with Complex Health Problems Skills</td>
<td>0.5</td>
</tr>
<tr>
<td>RN 53 Nursing Care of the Older Adult</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6.5</strong></td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 61 Nursing Care of the Critically Ill Adult and Coordinator of Care</td>
<td>2.5</td>
</tr>
<tr>
<td>RN 62 Nursing Care of the Critically Ill Adult and Coordinator of Care Clinical</td>
<td>3.5</td>
</tr>
<tr>
<td>RN 62A Nursing Care of the Critically Ill Adult Skills</td>
<td>0.5</td>
</tr>
<tr>
<td>RN 65 Nursing Care of the Client with Behavioral and Emotional Disorders</td>
<td>2</td>
</tr>
<tr>
<td>RN 66 Nursing Care of the Client with Behavioral and Emotional Disorders Clinical</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10.5</strong></td>
</tr>
</tbody>
</table>

2019-2020 Fresno City College Catalog
Required Courses on Entry for Transfer Students from other Accredited Nursing Programs:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 101 Transition to Fresno City College Registered Nursing Program</td>
<td>1.5</td>
</tr>
<tr>
<td>RN 102 Transition to Fresno City College Registered Nursing Program Skills</td>
<td>1-2</td>
</tr>
</tbody>
</table>

Elective Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 19 Work Experience (Cooperative), Occupational</td>
<td></td>
</tr>
<tr>
<td>RN 105 Medication Math</td>
<td></td>
</tr>
<tr>
<td>RN 107 Introduction to Nursing Process</td>
<td></td>
</tr>
</tbody>
</table>

Degree/Licensure Requirements:
In addition to the program application requirements and the program course requirements, the following courses are required to apply for licensure.

1. Communication 1 or 2. All course work must be completed with a “C” or better.
2. Electives to complete the AS degree requirements. All course work must be completed with a “C” or better.

Note: All application requirements, program requirements, and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College Health Career Counselor every semester for current information.

PARALEGAL – MAJOR #2550

This curriculum is designed for the student who desires employment and advancement in the field of paralegal work.

ASSOCIATE IN SCIENCE DEGREE AND

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Describe the nature and historical development of the field of paralegalism, the ethical rules applicable to paralegals and the role of the paralegal in today's law office.
2. Demonstrate basic legal research, analysis and writing skills in preparing basic legal documents.
3. Define basic legal terminology and explain the basic substantive and procedural concepts applicable to American civil and criminal law.
4. Demonstrate basic proficiency in certain selected computer software programs used in the law office for: legal forms preparation, time and billing, calendaring, litigation support and case management.

Completion of 32 units of common-core courses.

REQUIRE CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 20 Law and the Legal System</td>
<td>3</td>
</tr>
<tr>
<td>BT 28 Microsoft Word I</td>
<td>1.5</td>
</tr>
<tr>
<td>BT 29 Microsoft Word II</td>
<td>1.5</td>
</tr>
<tr>
<td>PLEGAL 1 Introduction to Paralegalism</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 2A Legal Research &amp; Writing I</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 2B Legal Research &amp; Writing II</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 6A Litigation I</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 6B Litigation II</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 7 Law Office Practices</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 14 Law Office Computing</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 19 Work Experience (Cooperative) Occupational (300 hours)</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Core Curriculum 31

ELECTIVES

Choose any 2 of the following courses for a total of 6 units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLEGAL 3 Family Law</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 4 Probate</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 5 Business Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 8 Torts/Contracts</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 10 Criminal Law &amp; Procedure</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 11 Evidence</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 12 Bankruptcy</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 13 Discovery/Trial Preparation</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 15 Debt Collection &amp; Enforcement of Judgments</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 17 Administrative Law/Workers’ Compensation</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 18 Employment Law</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 20 Civil Rights and Liberties</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 156/BT 140 Legal Document Processing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 37

PHILOSOPHY FOR TRANSFER – MAJOR #5341

An Associate in Arts in Philosophy for Transfer is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. An Associate in Arts in Philosophy for Transfer is a great way to develop critical and creative reasoning skills, enhance an ability to read complex materials with comprehension, and improve communication skills. These assets will be valuable as a transfer student to a four-year institution, whether you major in philosophy or some other field, and will enhance your preparation for a wide range of career opportunities. To earn the Associate in Arts in Philosophy for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate independent and critical thinking regarding important topics in philosophy.
2. Analyze and evaluate arguments, both philosophical and non-philosophical, in accordance with the standards taught in our philosophy courses.

REQUIRED CORE COURSES Units
PHIL 1A/1AH Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality ..... 3
PHIL 1C Ethics ......................................................... 3
PHIL 6 Symbolic Logic .............................................. 3
Select three of the following courses Units (min. two PHIL):
HIST 1/1H Western Civilization to 1648, or Honors Western Civilization to 1648............. 3
HIST 2/2H Western Civilization since 1648, or Honors Western Civilization since 1648 ........ 3
HUMAN 10/10H Classical Humanities, or Honors Classical Humanities......................... 3
HUMAN 11/11H Modern Humanities, or Honors Modern Humanities.......................... 3
PHIL 1B Social and Political Philosophy.................................................. 3
PHIL 1D World Religions .................................................. 3
PHIL 2/2H Critical Reasoning and Analytic Writing, or Honors Critical Reasoning and Analytic Writing........................................ 3
PHIL 5 Philosophy of Religion.................................................. 3
Total 18

PHOTOGRAPHY

PROFESSIONAL PHOTOGRAPHY
– FORMERLY PHOTOGRAPHY – MAJOR #5221

Students in this curriculum are trained in the major areas of professional photography. Positions for which graduates may qualify, depending upon their interest, abilities, and achievement, include portrait, commercial, editorial, digital, and retail fields. Some equipment and supplies provided.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Produce professional quality photographs in various contemporary formats.

FIRST YEAR
First Semester Units
PHOTO 6 Digital Imaging Fundamentals................................. 3
PHOTO 12 Beginning Photoshop................................. 3
PHOTO 15 Photography and Visual Literacy.......................... 3
Total 9

SECOND YEAR
First Semester Units
PHOTO 18 Digital Black and White Photography.................. 3
PHOTO 30 Editorial Photography...................................... 3
PHOTO 57 Applied Color and Alternative Photographic Media................................. 3
Total 9

Second Semester Units
PHOTO 32 Commercial Portraiture.................................. 3
PHOTO 45 Advanced Projects.......................................... 3
Total 6

Note: Associated degree requirements are listed on page 35.

PROFESSIONAL PHOTOGRAPHY
– FORMERLY PHOTOGRAPHY – MAJOR #5221

Students in this curriculum are trained in the major areas of professional photography. Positions for which graduates may qualify, depending upon their interest, abilities, and achievement, include portrait, commercial, editorial, digital, and retail fields. Some equipment and supplies provided.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:
1. Produce professional quality photographs in various contemporary formats.

First Year - First Semester Units
PHOTO 6 Digital Imaging Fundamentals................................. 3
PHOTO 12 Beginning Photoshop................................. 3
PHOTO 30 Editorial Photography...................................... 3
Total 9

First Year - Second Semester Units
PHOTO 15 Photography and Visual Literacy.......................... 3
PHOTO 23 Advanced Photoshop................................. 3
PHOTO 32 Commercial Portraiture.................................. 3
Total 9

Second Year - First Semester Units
PHOTO 26 Lighting Principles........................................ 3
PHOTO 45 Advanced Projects.......................................... 3
PHOTO 57 Applied Color and Alternative Photographic Media................................. 3
Total 9

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COMMERCIAL PHOTOGRAPHY – MAJOR #5222

Students taking these courses will develop skills in creating photographs for commercial clients from small and large scale studio and location situations. Students will learn appropriate workflow and processes to compete in the commercial marketplace.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Utilize skills in picture creation, selection and cropping with emphasis on impact and marketability.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 6</td>
<td>Digital Imaging Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 12</td>
<td>Beginning Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 23</td>
<td>Advanced Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 26</td>
<td>Lighting Principles</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 32</td>
<td>Commercial Portraiture</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 57</td>
<td>Applied Color and Alternative Photographic Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18

PHOTOJOURNALISM – MAJOR #5225

Students will learn the art of storytelling through images and the power in conveying another person’s story through their own eyes. Digital composition and editing of storytelling images will be explored and utilized.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Produce story telling photographs and video for contemporary internet media.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 52</td>
<td>Adobe Lightroom</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 6</td>
<td>Digital Imaging Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 30</td>
<td>Editorial Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 49</td>
<td>Multimedia Photojournalism</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 15

PHYSICS FOR TRANSFER – MAJOR #6335

An Associate in Science in Physics for Transfer is designed for students who plan to complete a bachelor’s degree in Physics at a CSU or UC campus. An Associate in Science in Physics for Transfer is comprised of the core set of introductory Physics and Mathematics courses that assist a student to develop critical thinking and analytical reasoning skills and establish conceptual frameworks for understanding physical phenomena. To earn the Associate in Science in Physics for Transfer, students must complete a maximum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 18 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. For more information on university admission and transfer requirements, students should consult with a counselor.
ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:

1. Given a set of initial conditions, apply problem solving techniques to develop a mathematical model which describes the physical characteristics of a given system. Identify known and unknown quantities, derive appropriate equations, and analyze the results.

2. Given a physical system, identify the core concepts and physical laws that apply. Describe the system in terms of the core concepts and physical laws. Select appropriate conceptual model(s) and justify their application.

3. In the laboratory setting, demonstrate safe laboratory practices.

4. In the laboratory setting, determine the relationship between the physical quantities of a system. Develop mathematical models and use analytical and graphical means to predict the subsequent behavior of the system.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 4A</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4B</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4C</td>
<td>4</td>
</tr>
<tr>
<td>MATH 5A</td>
<td>5</td>
</tr>
<tr>
<td>MATH 5B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 6</td>
<td>4</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Explain the method of inquiry used by political science.

2. Evaluate the success of political systems in building community, fostering economic growth and attaining the goals of liberty, security, and equality.

3. Identify and explain the causes and consequences of increasing global interdependence.

REQUIRED CORE COURSES: Select one of the following:

- POLSCI 2/2H American Government, or Honors American Government

LIST A: Select three of the following:

- MATH/PSY 42 Statistics for the Behavioral Sciences
- MATH 11 Elementary Statistics
- POLSCI 1 Modern Politics
- POLSCI 3 Introduction to Political Theory and Thought
- POLSCI 5 Comparative Government
- POLSCI 24 International Relations

LIST B: Select two of the following:

- BA 20 Law and the Legal System
- ECON 40 Introduction to Microeconomics
- ECON 50 Introduction to Macroeconomics
- POLSCI 13 Legal and Judicial Reasoning
- SOC 1B Critical Thinking about Social Problems

Notes:
- Required Major Courses
- CSU General Education or IGETC
- Transferable Elective as needed to reach 60 transferable units
- Degree Total

POLITICAL SCIENCE FOR TRANSFER

– MAJOR #7450

The Associate in Arts in Political Science for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the associate in arts transfer degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree.

Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students are required to complete: A.) A minimum of 18 semester units in the major with a grade of C or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework. B.) 60 semester CSU transferable units using the CSU-General Education Breadth pattern; OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. C.) No more than 60 semester units are required.

PSYCHOLOGY – MAJOR #7501

The Psychology AA Program is designed to provide a strong academic foundation for students planning to major in Psychology at a four-year institution. Psychology is the scientific study of human behavior and mental processes. Two of the field’s key features reflect the highly valuable approach psychology takes to gain knowledge about human behavior. First, psychology emphasizes the use of critical thinking and the scientific method to ask questions, acquire and evaluate information, and solve problems. Second, the field recognizes the complexity of human behavior, and is guided by the idea that a complete understanding of human behaviors, emotions, and thoughts must include an analysis of factors as diverse as biological, interpersonal, and sociocultural influences. Thus, psychology represents a method of inquiry that can be a useful tool for students with a variety of interests and career goals.

Earning an Associate in Arts degree in Psychology may be beneficial for individuals whose vocational plans include working in human or social services (e.g., law enforcement, education, sales, social welfare, and nursing). Students are encouraged to follow the CSU General Education-Breadth or IGETC pattern with the assistance of a counselor.
ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Students will apply their knowledge of psychology's major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field's subdisciplines.

2. Students will recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.

3. When presented with information and claims about human behavior and mental processes, students critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2/2H General Psychology, or Honors General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 36 Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 42 Statistics for the Behavior Sciences</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

ELECTIVES

DEPT: Choose two (2) of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 5</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSY 12</td>
<td>Child Abuse</td>
</tr>
<tr>
<td>PSY 16</td>
<td>Abnormal Psychology</td>
</tr>
<tr>
<td>PSY 18</td>
<td>Criminal Personalities</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

LIFESPAN: Choose one (1) of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 25</td>
<td>Human Sexuality</td>
</tr>
<tr>
<td>PSY 33</td>
<td>Personal &amp; Social Adjustment</td>
</tr>
<tr>
<td>PSY 38</td>
<td>Lifespan Development</td>
</tr>
<tr>
<td>PSY 39</td>
<td>Child Growth and Development</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

DIVERSITY: Choose one (1) of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>Introduction to African American Studies</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society</td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or Honors Cultural Anthropology</td>
</tr>
<tr>
<td>ASAMER 15</td>
<td>Introduction to Asian-Americans</td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Minority Groups</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

PSYCHOLOGY FOR TRANSFER – MAJOR #7550

Psychology is a useful major for students with a variety of interests and career goals due to its emphasis on critical thinking, the scientific method of inquiry, and the interactive role that biological, psychological, developmental, and sociocultural factors play in affecting human behavior and mental processes. The associate in arts in Psychology for Transfer degree is designed for students who plan to complete a bachelor's degree in a similar major at a CSU campus. To earn the associate in arts in Psychology for Transfer degree, students must complete a minimum of 60 required semester units of CSU-transferable coursework, including either the CSU-GE Breadth or IGETC requirements and 19-20 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Apply their knowledge of psychology's major theoretical perspectives (psychodynamic, behavioral, biological, humanistic, cognitive, evolutionary, and sociocultural) and its scientific research process when studying topics of interest, including methodologies and ethical concerns within the field's subdisciplines.

2. Recognize and analyze the application of psychological concepts and theories to human experiences across the lifespan and within the context of various social and cultural constructs.

3. When presented with information and claims about human behavior and mental processes, critically evaluate them within a framework that views humans as continually developing physiological, social, and psychological organisms.

REQUIRED CORE COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2/PSY 2H General Psychology, or Honors General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 36 Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY/MATH 42 Statistics for the Behavioral Sciences</td>
<td>4</td>
</tr>
<tr>
<td>PSY 45 Introduction to Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one of the following course:</strong></td>
<td><strong>Units</strong></td>
</tr>
<tr>
<td>BIOL 5</td>
<td>Human Biology</td>
</tr>
<tr>
<td>PSY 5</td>
<td>Social Psychology</td>
</tr>
</tbody>
</table>
Choose one of the following courses:

NOTE: Psychology 5 can be taken in this section only if it was not taken as part of the previous sections

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 5</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 16</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 25</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSY 33</td>
<td>Personal and Social Adjustment</td>
<td>3</td>
</tr>
</tbody>
</table>

Notes: Required Major Courses ..................................19-20 units.
CSU General Education or IGETC ................................... 39 units.
Transferable Elective as needed to reach 60 transferable units.
Degree Total ............................................................60 units.

PHYSICAL EDUCATION

SPORTS MEDICINE – MAJOR #4330

This degree is designed to prepare students for various fields of study related to health care and athletic sports related injuries as well as preparation for transfer to a four year university.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Identify and discuss the different Sports Medicine professions and their role in the health care continuum.
2. Identify anatomy and physiology as it pertains to human performance and injury.
3. Differentiate career opportunities relative to different populations.
4. Demonstrate basic cardiopulmonary resuscitation, first aid skills, musculoskeletal and general medical skills.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy, or</td>
<td></td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>Human Anatomy &amp; Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>Human Physiology, or</td>
<td></td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>5</td>
</tr>
<tr>
<td>FN 35</td>
<td>Nutrition and Health, or</td>
<td></td>
</tr>
<tr>
<td>FN 41</td>
<td>Sports Nutrition</td>
<td>2-3</td>
</tr>
<tr>
<td>HLTH 2</td>
<td>First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 3</td>
<td>Concepts in Health and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>PE 15A</td>
<td>Weight Training (Women), or</td>
<td></td>
</tr>
<tr>
<td>PE 15B</td>
<td>Weight Training (Men), or</td>
<td></td>
</tr>
<tr>
<td>PE 15C</td>
<td>Weight Training (Coed)</td>
<td>1-2</td>
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<tr>
<td>PE 18A</td>
<td>Sports Medicine Lab A</td>
<td>2</td>
</tr>
<tr>
<td>PE 18B</td>
<td>Sports Medicine Lab B</td>
<td>2</td>
</tr>
<tr>
<td>PE 20</td>
<td>Athletic Training</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 26-28

RADIONIC TECHNOLOGY - MAJOR #4570

Imaging examinations performed by, and accompanying responsibilities assigned to, a radiographer shall be at the direction of physicians qualified to request and/or perform radiologic procedures. Upon completion of the program the radiographer shall be able to:

1. Apply knowledge of anatomy, physiology, and radiographic techniques to demonstrate accurately anatomical structures on a radiograph or other imaging receptor.
2. Determine exposure factors to achieve optimum radiographic techniques with minimum radiation exposure to the patient.
3. Evaluate radiographic images for appropriate positioning and imaging quality.
4. Apply the principles of radiation protection for the patient, self, and others.
5. Provide patient care and comfort.
6. Recognize emergency patient conditions and initiate lifesaving first aid and basic life support procedures.
7. Evaluate the performance of radiologic systems, know the safe limits of equipment operation, and report malfunctions to the proper authority.
8. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
9. Participate in radiologic quality assurance programs.
10. Assist in fluoroscopic procedures.

Classes are conducted on the Fresno City College campus. Students also attend classes at local hospitals affiliated with the program for clinical experience.

An associate in science degree will be granted upon successful completion of requirements for graduation, which includes formal hospital training. The student will be eligible to take the examination given by the American Registry of Radiologic Technologists upon successful completion of requirements for graduation.

Admission Policy

Enrollment is limited in the Radiologic Technology Program. There are no restrictions as to age, race, or marital status. In order to qualify for admission to the program, the applicant must meet all of the following conditions:

Application Requirements

Minimum prerequisite requirements for application to the Radiological Technology Program follow.

1. Have completed and submitted an Academic Summary Form for the Radiologic Technology Program.
2. Have completed Biology 20, Human Anatomy, and Biology 22, Human Physiology, or Biology 21A, Human Anatomy and Physiology I, and Biology 21B, Human Anatomy and Physiology II (or equivalent), with a grade of "C" or better.
3. Have completed Health Information Technology 10, Medical Terminology (or equivalent), with a grade of "C" or better.
4. Have attained a minimum cumulative grade point average (GPA) of "C+" (2.75) in completed college work.
5. Have no physical impairment that would preclude the performance of all radiologic technology duties.
6. Be in good physical and mental health.

Note: Prior to registration for the semester in which the applicant is scheduled to take courses in Radiologic Technology, the student must submit evidence of physical examination by a licensed physician.

Background Check
Upon entry into the program, students will be required to obtain a background check.

Change of Name, Address, and/or Telephone Number
Applicants and radiologic technology students must keep the Allied Health, Physical Education, and Athletics office informed of any change in name, address, and/or telephone number. Failure of applicants to inform the Allied Health, Physical Education, and Athletics office of this vital information may result in loss of entry into the program.

Academic Requirements
All program entry requirement courses listed above must be completed with a grade of “C” or better.

Students in the radiologic technology program must earn a “C” grade or better (or a “Credit” grade when applicable) in all program courses. Less than a “C” or a “Credit” grade in any radiologic technology course requires that the course be repeated before continuing with the major. Courses must be repeated in their entirety. Courses may be repeated once only.

Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he/she is unsuited to the profession or is not progressing satisfactorily based on the professional judgment of the faculty, he/she may be asked to withdraw from the program.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Students will pass the ARRT National Registry Examination on the first attempt.

Radiologic Technology Course Sequence (all courses must be completed with grade of “C” or better)

<table>
<thead>
<tr>
<th>First Year - First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 1A Fundamentals of Radiology Technology</td>
<td>6</td>
</tr>
<tr>
<td>RAD 1B Basic Radiographic Positioning Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>RAD 1C Clinical Orientation Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>RAD 1D Nursing Procedures in Radiologic Technology</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Year - Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 2A Radiation Biology</td>
<td>6</td>
</tr>
<tr>
<td>RAD 2B Advanced Radiographic Positioning Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>RAD 2C Clinical Observation Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>RAD 2D Quality Assurance in Radiologic Technology</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year - First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 3 Basic Clinical Radiologic Technology</td>
<td>9</td>
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<tr>
<td>Total</td>
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</table>

<table>
<thead>
<tr>
<th>Second Year - Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 4A Pathology in Radiologic Technology</td>
<td>2</td>
</tr>
<tr>
<td>RAD 4B Advanced Clinical Radiologic Technology</td>
<td>12</td>
</tr>
<tr>
<td>RAD 4C Advanced Radiologic Positioning Laboratory-Cranium</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
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</table>

<table>
<thead>
<tr>
<th>Second Year - Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 5A Special Procedures in Radiologic Technology</td>
<td>2</td>
</tr>
<tr>
<td>RAD 5B Specialized Clinical Radiologic Technology</td>
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<tr>
<td>RAD 5C Fluoroscopy</td>
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<td>Total</td>
<td>16</td>
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</table>

RECREATION LEADERSHIP – MAJOR #4300

This degree is designed to prepare students for employment opportunities in recreation and leisure as well as preparation for transfer to a four year university.

Student Learning Outcomes:
1. List and define the programs and services of the recreation programs in the community.
2. Identify and apply the skills needed to be a recreational leader in a community setting.

ASSOCIATE IN ARTS DEGREE

CORE COURSES

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 1 Contemporary Health Issues</td>
</tr>
<tr>
<td>HLTH 2 First Aid and Safety</td>
</tr>
<tr>
<td>REC 19 Work Experience (Cooperative), Occupational</td>
</tr>
<tr>
<td>REC 20 Introduction to Recreation</td>
</tr>
<tr>
<td>REC 21 Recreation Leadership</td>
</tr>
<tr>
<td>REC 23 Outdoor Recreation</td>
</tr>
<tr>
<td>PE Course Four (4) Physical Education Activity</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

RECOMMENDED SEQUENCE

First Semester

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 1 Contemporary Health Issues</td>
</tr>
<tr>
<td>REC 20 Introduction to Recreation</td>
</tr>
<tr>
<td>PE Course Physical Education Activity</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 2 First Aid and Safety</td>
</tr>
<tr>
<td>REC 19 Work Experience (Cooperative), Occupational</td>
</tr>
<tr>
<td>PE Course Physical Education Activity</td>
</tr>
</tbody>
</table>
The Respiratory Care Practitioner (RCP) is a health care specialist involved in managing, diagnositically evaluating, and providing care to patients with deficiencies and abnormalities affecting their cardiopulmonary system. Respiratory care practitioners comprise a critical sector of the allied health care workforce. Next to nurses, RCPs are the most frequently seen health care provider at the patient bedside. Enrollment is limited in the Respiratory Care Practitioner Program. There are no restrictions as to age, race, or marital status. The program is lottery based. In order to qualify for admission to the program, the applicant must have met all of the following conditions. Application Requirements: Minimum prerequisite requirements for application to the Respiratory Care Practitioner Program follow. 1. Graduated from high school with a minimum grade point average (GPA) of 2.0 or completed the General Educational Development test with an average standard score of 45. 2. Completed the following prerequisites with a C or better: Biology 31, Biology 20 and Biology 22 or Biology 21A and Biology 21B, Chemistry 3A, Mathematics 103. Advisory of English 1A. 3. All program entry requirement courses must be completed with a grade of "C" or better. 4. All courses leading to the associate degree must also be completed with a grade of "C" or better. 5. Have attained a minimum cumulative grade point average (GPA) of 2.5 in completed college work. 6. Students in the respiratory care practitioner program must earn a "C" grade or better (or a "Credit" grade when applicable) in all required respiratory care courses. 7. Less than a "C" or a "Pass" grade in any required Respiratory Care course necessitates repeating the course before continuing with the major. 8. Respiratory Care courses must be repeated in their entirety. 9. Course repeatability and failure policy will be followed as outlined in the Respiratory Care Student Handbook. 10. Have no physical impairment that would preclude the performance of any respiratory care practitioner duties. 11. Be in good physical and mental health. 12. Complete application for the RCP program. Applications may be pick up at the Allied Health, Physical Education and Athletics division office. 13. Return the completed application to the division office by the deadline. The application period may be found on the Fresno City College website. 14. Background checks and drug screens are mandatory. 15. Program orientation is mandatory. 16. Safe professional practice is necessary for retention of students in the program. If a student demonstrates that he or she is unsuited to the profession or is not progressing satisfactorily based on the professional judgment of the faculty, the student may be asked to withdraw from the program.

ASSOCIATE IN SCIENCE DEGREE

Respiratory Care course sequence (all must be completed with a "C" grade or better):

Student Learning Outcome:

1. To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRT).

FIRST YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCARE 16</td>
<td>Patient Assessment</td>
<td>3</td>
</tr>
<tr>
<td>RCARE 16B</td>
<td>Diagnostic Methods</td>
<td>3</td>
</tr>
<tr>
<td>RCARE 17</td>
<td>Respiratory Care Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>RCARE 18</td>
<td>Physiology of the Respiratory System</td>
<td>3</td>
</tr>
<tr>
<td>RCARE 20</td>
<td>Introduction to Respiratory Care</td>
<td>5.5</td>
</tr>
<tr>
<td>RCARE 21</td>
<td>Applications and Procedures in Respiratory Care</td>
<td>10</td>
</tr>
</tbody>
</table>

SECOND YEAR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCARE 21B</td>
<td>Simulation Lab Skills</td>
<td>1</td>
</tr>
<tr>
<td>RCARE 22</td>
<td>Clinical Applications and Ventilator Management</td>
<td>8</td>
</tr>
<tr>
<td>RCARE 23</td>
<td>Clinical Applications in Respiratory Care II</td>
<td>8</td>
</tr>
<tr>
<td>RCARE 24</td>
<td>Neonatal and Pediatric Diseases</td>
<td>2</td>
</tr>
<tr>
<td>RCARE 25</td>
<td>Respiratory Disease</td>
<td>2</td>
</tr>
</tbody>
</table>

Respiratory Care Practitioner Program Requirements

(A "C" or better grade is required in each course.)

In addition to the program application requirements and the Respiratory Care course sequence requirements, the following courses are required to apply for the associate degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSC 11</td>
<td>Introductory Physical Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 47

Note: All applications requirements, program requirements, and selection criteria are subject to change. Students will enter the selection pool based on the current catalog or catalog supplement. Contact a Fresno City College Health Science Counselor every semester for current information.
SIGN LANGUAGE INTERPRETING PREPARATION PROGRAM – MAJOR #5101

To prepare students for entry-level interpreting positions in a variety of settings such as schools, social service agencies and limited medical situations.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:
1. Discuss and apply knowledge of linguistic, cross-cultural and interpretation theories.
2. Demonstrate communicative competency in English and in ASL through effective communication in settings with speakers of varying age, gender and ethnicity.
3. Analyze, identify, and apply personal, professional and ethical decisions in a manner consistent with theoretical models and standard professional practice.
4. Formulate effective one-on-one group interpretation/transliteration in limited settings.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 4</td>
<td>High-Intermediate American Sign Language 4</td>
</tr>
<tr>
<td>ASL 5</td>
<td>Deaf Culture 3</td>
</tr>
<tr>
<td>ASL 6</td>
<td>Structure of American Sign Language 3</td>
</tr>
<tr>
<td>ASL 7</td>
<td>Deaf History 3</td>
</tr>
<tr>
<td>ASL 8</td>
<td>American Sign Language Literature/Folklore 3</td>
</tr>
<tr>
<td>ASL 20</td>
<td>Introduction to Interpreting 3</td>
</tr>
<tr>
<td>ASL 21</td>
<td>American Sign Language to English Translation 3</td>
</tr>
<tr>
<td>ASL 22</td>
<td>English to American Sign Language Translation 3</td>
</tr>
<tr>
<td></td>
<td>Total 25</td>
</tr>
</tbody>
</table>

SOCIOMETRY FOR TRANSFER – MAJOR #7800

The Associate in Arts in Sociology for Transfer degree is designed to acquaint students with tools to understand the functioning of the society in which they live. The degree offers students a broad and multicultural perspective of the world around them and also provides them with a solid foundation for further study in sociology. Sociology can assist in occupations such as teaching, social work, drug and alcohol counseling, police work, probation aides, juvenile hall counseling, medical work, international business, and any other occupation that places you in contact with people of diverse backgrounds. The Associate in Arts in Sociology for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. To earn the associate in arts in Sociology for Transfer degree, students must complete the following requirements: Completion of 60 semester units that are eligible for transfer to the California State University, including all of the following: Students must earn a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (CSU-GE). Completion of a minimum of 18 semester units in the associate in arts degree in Sociology for Transfer as identified by the Fresno City College catalog. Students must earn a “C” or better in all of the courses required for this degree.

Student Learning Outcome:
1. Understand the complexity of social life, including an understanding of the social forces that shape institutions in society, sources of societal problems, and remedies to address those problems.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 5</td>
<td>Social Psychology 3</td>
</tr>
<tr>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics 4</td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td>Introduction to Sociology, or</td>
</tr>
<tr>
<td></td>
<td>Honors Introduction to Sociology 3</td>
</tr>
<tr>
<td>SOC 1B</td>
<td>Critical Thinking about Social Problems 3</td>
</tr>
<tr>
<td>SOC 32</td>
<td>Introduction to Marriage and Family 3</td>
</tr>
<tr>
<td>Choose one of the following 3-unit courses:</td>
<td>Units</td>
</tr>
<tr>
<td>AMST 10</td>
<td>American Pluralism: A Search for Common Ground in a Multicultural Society 3</td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or</td>
</tr>
<tr>
<td></td>
<td>Honors Cultural Anthropology 3</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare 3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Minority Groups 3</td>
</tr>
<tr>
<td>SOC/WSTS 5</td>
<td>Sociology of Rape 3</td>
</tr>
<tr>
<td>SOC/WSTS 7</td>
<td>Domestic Violence: Abuse within the Family 3</td>
</tr>
<tr>
<td>SOC/HS 10</td>
<td>Introduction to Aging Studies 3</td>
</tr>
<tr>
<td>SOC/CLS 14</td>
<td>Sociology of the Mexican American Community 3</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women 3</td>
</tr>
</tbody>
</table>

Notes: Required Major Courses 19 units.
CSU General Education or IGETC 39 units.
Transferable Electives as needed to reach 60 transferable units.
Degree Total 60 units.
SPANISH – MAJOR #5510

The Spanish Program is designed to prepare students for entry into a variety of career options requiring intermediate or better levels of fluency. The Spanish major also acquaints students with the cultures of Spanish speaking countries.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Engage in conversation using the Spanish in daily life situations.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literary excerpts written in Spanish.
3. Write at the advance level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U.S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish, or Spanish for Spanish Speakers</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>High-Intermediate Spanish, or Spanish for Spanish Speakers</td>
<td>5</td>
</tr>
</tbody>
</table>

SELECT a minimum of twelve (12) additional units from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 5</td>
<td>The Short Story: Mexico, Spain &amp; the U.S.</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 6</td>
<td>The Short Story: Latin America</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 7</td>
<td>Advanced Spanish: Composition &amp; Grammar</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 8</td>
<td>Advanced Spanish: Conversation</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 9</td>
<td>Spanish Business and Culture</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 41</td>
<td>Introduction to Poetry in Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 42</td>
<td>Hispanic American Culture</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. An associate in arts degree in Spanish will be awarded to any candidate who successfully completes a total of 60 units which include associate degree requirements and a minimum of 22 units of course work as listed above. Associate degree requirements are listed on page 35. General Education requirements for transfer certification are listed on page 47.
2. Two Spanish courses can be used to fulfill the area “C” General Education requirement (in Humanities) for graduation or transfer.
3. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

SPANISH FOR TRANSFER – MAJOR #5550

The Associate in Arts in Spanish for Transfer is designed to prepare students for further study in Spanish at the university level. A degree in Spanish is a great way to prepare students for entry into a variety of career options requiring intermediate or better levels of fluency. The Associate in Arts in Spanish major also acquaints students with the cultures of Spanish speaking countries. The Associate in Spanish for Transfer is specifically designed for students who plan to complete a bachelor’s degree in Spanish at a CSU campus. To earn the Associate in Spanish for Transfer, students must complete 60 required semester units of CSU-transferable coursework, CSU-GE Breadth or IGETC requirements and 21-24 semester units within the major. Students must maintain a minimum 2.0 GPA, including grades of C or higher in each course taken to fulfill the major. The local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admissions and transfer requirements.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Engage in conversation using the Spanish in daily life situation.
2. Read with a certain depth of understanding magazine or newspaper articles, short stories, and literary excerpts written in Spanish.
3. Write at the advance level in a variety of modalities including personal and professional letters, short narratives, and descriptive essays.
4. Recognize and understand cultural similarities and differences between U.S. culture and that of the Spanish speaking world. Distinguish simple behavioral patterns that represent these cultures and behave in culturally appropriate ways in specific situations.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1</td>
<td>Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 2</td>
<td>High-Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish, or Intermediate Spanish for Spanish Speakers</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>High-Intermediate Spanish, or High-Intermediate Spanish for Spanish Speakers</td>
<td>5</td>
</tr>
</tbody>
</table>

GROUP A: Select a minimum of four (4) additional units from the following list

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 5</td>
<td>The Short Story: Mexico, Spain, and the U.S.</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 6</td>
<td>The Short Story: Latin America</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 7</td>
<td>Advanced Spanish: Composition and Grammar</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Description</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>SPAN 8</td>
<td>Advanced Spanish Conversation</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 9</td>
<td>Spanish Business and Culture</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 41</td>
<td>Introduction to Poetry in Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 42</td>
<td>Hispanic American Culture</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21-24</strong></td>
</tr>
</tbody>
</table>

**Notes:**
1. Students entering the Spanish program at Spanish 2 or higher are required to complete the specified unit requirements of the degree. Students must consult with the Foreign Language Department Chair for approval of course substitutions.
2. Some of the above courses may have prerequisite. See the catalog or schedule of classes.
3. The Associate Degree requires completion of the major (21-24 units) with a “C” or better in each course plus the completion of the General Education (either CSU-GE Breadth or IGETC) for a total of 60 semester units with a 2.0 or better GPA.
4. Two of the following courses may be challenged according to Foreign Language Department policy: Spanish 1, 2.

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### THEATRE ARTS – MAJOR #5440

The Theatre Arts major is a performance-oriented major. It emphasizes a “hands on” approach and places special focus on the “well rounded” theatre artist. Students who complete the program can successfully transfer to a competitive four-year university or conservatory.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**
1. Demonstrate the acting process from script and character analysis, through a performance before an audience.
2. Demonstrate basic proficiency in technical theatre production.
3. Analyze a play in context of its historical period, structure, theme, character, style and other components of drama.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 23</td>
<td>Technical Theatre Practicum</td>
<td>3</td>
</tr>
<tr>
<td>TA 25</td>
<td>Stagecraft, or</td>
<td></td>
</tr>
<tr>
<td>TA 35</td>
<td>Costume Craft, or</td>
<td></td>
</tr>
<tr>
<td>TA 36</td>
<td>Costume Design</td>
<td>3</td>
</tr>
<tr>
<td>TA 30</td>
<td>Theatre Appreciation, or</td>
<td>3</td>
</tr>
<tr>
<td>TA 15C</td>
<td>Creative Writing, Playwriting, or</td>
<td></td>
</tr>
<tr>
<td>TA 38</td>
<td>Script Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TA 31</td>
<td>Theatre History and Literature I, or</td>
<td>3</td>
</tr>
<tr>
<td>TA 32</td>
<td>Theatre History and Literature II</td>
<td>3</td>
</tr>
<tr>
<td>TA 41</td>
<td>Beginning Acting, or</td>
<td></td>
</tr>
<tr>
<td>TA 42</td>
<td>Beginning Acting for Theatre Majors</td>
<td>3</td>
</tr>
<tr>
<td>TA 43</td>
<td>Intermediate Acting</td>
<td>3</td>
</tr>
<tr>
<td>TA 46</td>
<td>Voice for the Actor</td>
<td>3</td>
</tr>
</tbody>
</table>

Three Units from the Following Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 28</td>
<td>Introduction to Stage Makeup</td>
<td>3</td>
</tr>
<tr>
<td>TA 40</td>
<td>Performance Practicum</td>
<td>3</td>
</tr>
<tr>
<td>TA 44A</td>
<td>Actors Workshop</td>
<td>3</td>
</tr>
<tr>
<td>TA 48A</td>
<td>Teasers I</td>
<td>0.5</td>
</tr>
</tbody>
</table>

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### THEATRE ARTS FOR TRANSFER – MAJOR #5445

The Associate in Arts in Theatre Arts for Transfer degree is designed for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. To earn the associate in arts transfer degree, students must complete a maximum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Local graduation requirements are not required for the transfer degree. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements. Students are required to complete: A) a minimum of 18 semester units in the major with a grade of C or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework. B) 60 semester CSU-transferable units using the California State University-General Education-Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. C) No more than 60 semester units are required.

**ASSOCIATE IN ARTS DEGREE**

**Student Learning Outcomes:**
1. Identify the literature and styles of theatre.
2. Demonstrate the acting process.
3. Demonstrate the production process.

**CORE COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 30</td>
<td>Theatre Appreciation, or</td>
<td></td>
</tr>
<tr>
<td>TA 31</td>
<td>Theatre History and Dramatic Literature I</td>
<td>3</td>
</tr>
<tr>
<td>TA 40</td>
<td>Performance Practicum</td>
<td>3</td>
</tr>
<tr>
<td>TA 23</td>
<td>Technical Theatre Practicum</td>
<td></td>
</tr>
<tr>
<td>TA 41</td>
<td>Beginning Acting, or</td>
<td></td>
</tr>
<tr>
<td>TA 42</td>
<td>Beginning Acting for Theatre Majors</td>
<td>3</td>
</tr>
</tbody>
</table>
Elective Courses: Select 9 Units from the following courses:

- TA 25 Stagecraft ......................................................... 3
- TA 27B Introduction to Lighting Design .................. 3
- TA 28 Introduction to Stage Makeup ........................ 3
- TA 36 Costume Design.............................................. 3
- TA 38 Script Analysis ................................................ 3
- TA 40 Performance Practicum .................................... 3
- TA 43 Intermediate Acting ......................................... 3

Required Courses (Note: TA 40 can be taken in this section only if they were not taken as part of the core.)

- TA 23 Technical Theatre Practicum .............................. 3
- TA 25 Stagecraft ......................................................... 3
- TA 30 Theatre Appreciation, or Theatre History and Literature I, or
- TA 38 Script Analysis ................................................ 3
- TA 35 Costume Crafts ............................................... 3
- TA 41 Beginning Acting, or
- TA 42 Beginning Acting for Theatre Majors ........... 3

Select six units from the following list (Note: Courses used in the above list may not be repeated for this list:)

- TA 15C Creative Writing: Playwriting .......................... 3
- TA 27A Introduction to Scenic Design ................ 3
- TA 27B Introduction to Lighting Design .................. 3
- TA 28 Introduction to State Makeup .......................... 3
- TA 29A Advanced Technical Theatre Practicum I ........ 1
- TA 29B Advanced Technical Theatre Practicum II ....... 1
- TA 31 Theatre History and Dramatic Literature I ........ 3
- TA 32 Theatre History and Dramatic Literature II ........ 3
- TA 36 Costume Design .............................................. 3
- TA 38 Script Analysis ................................................ 3
- TA 39A Intermediate Crew Practicum I ................... 1
- TA 39B Intermediate Crew Practicum II ................... 1
- TA 40 Performance Practicum ................................... 3
- TA 43 Kennedy Center American College Theater
- Festival Topics ....................................................... 2
- TA 49 Introduction to Theatre Design ..................... 3

Notes:
1. Recommended electives for Physical Education: DANCE 10, 11, 12A, 14, & 16.

WELDING TECHNOLOGY

METAL FABRICATION OPTION - MAJOR #8371

Instruction in the design and fabrication of metal projects by welding and related practices. Skills will be taught in design, manufacturing processes, production techniques, and material cost estimation.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Given an idea or description, students will be able to design and plan the construction of one or more advanced metal fabricated projects.
2. From design and specifications, students will be able to determine estimated steel weights and cost calculations.
3. Students will be able to demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds and other joining processes with quality workmanship to assemble the metal components of advanced projects.
5. During the construction of their project, students will demonstrate the efficient use of time and materials to produce their advanced projects.
METAL FABRICATION OPTION - MAJOR #8371

Instruction in the design and fabrication of metal projects by welding. Skills will be taught in design, manufacturing processes, production techniques, and material cost estimation.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Given an idea or description, students will be able to design and plan the construction of one or more advanced metal fabricated projects.
2. From design and specifications, students will be able to determine estimated steel weights and cost calculations.
3. Students will be able to demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds and other joining processes with quality workmanship to assemble the metal components of their advanced projects.

REQUIRED CORE COURSES

FIRST YEAR

First Semester
- AT 10 Technical Computer Applications ................. 3
- AT 130 Industrial Mathematics, or MATH 201 Elementary Algebra .......... 3-5
- WELD 2A Introduction to Welding Technology ....... 6

Second Semester
- AT 21 Occupational Safety and Health .................. 2
- AT 40 Preparing for Employment Opportunities ........ 3
- WELD 2B Advanced Multi-Process Welding .......... 5
- CADD 16 3D Solid Modeling I ................. 3

SECOND YEAR

First Semester
- DRAFT 12 Drafting Practices ......................... 3
- WELD 3A Welding Design and Fabrication .......... 5

Second Semester
- WELD 3B Intermediate Welding Design and Fabrication .... 5
- Electives ............................................. 2-3

Recommended Electives: CAM 10; CADD 24, 34; ENGR 10, 11; WELD 56.

Note: Associate degree requirements are listed on page 35.

PIPE AND STRUCTURAL STEEL CERTIFICATION OPTION – MAJOR #8372

Welding technology provides an opportunity for students to prepare for employment in welding and metal occupations. Specific preparation is provided in welding and metal fabrication or pipe and steel certification procedures.

Pre-employment training for structural steel and pipe welding technicians. An emphasis is placed on developing certification code-level proficiency in the use of shielded metal arc and flux cored arc welding procedures used in the construction of components on bridges, building, and pressure vessel systems.

ASSOCIATE IN SCIENCE DEGREE

Student Learning Outcomes:
1. Students will demonstrate correct usage of all weld symbols on the American Welding Society welding symbols chart.
2. Students will weld in all welding positions.
3. Students will correctly use ASME, AWS and API codes.
4. Students will perform and weld different pipe configurations according to specification.

FIRST YEAR

First Semester
- AT 10 Technical Computer Applications ................. 3
- AT 130 Industrial Mathematics, or MATH 201 Elementary Algebra .......... 3-5
- WELD 2A Introduction to Welding Technology ....... 6

Total 15

Second Semester
- AT 21 Occupational Safety and Health .................. 2
- AT 40 Preparing for Employment Opportunities ........ 3
- WELD 2B Advanced Multi-Process Welding .......... 5

Total 10
### PIPE AND STRUCTURAL STEEL CERTIFICATION

**OPTION – MAJOR #8372**

Welding technology provides an opportunity for students to prepare for employment in welding and metal occupations. Pre-employment training for structural steel and pipe welding technicians. An emphasis is placed on developing certification code-level proficiency in the use of shielded metal arc and flux cored arc welding procedures used in the construction of components on bridges, buildings, and pressure vessel systems.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**
1. Students will demonstrate correct usage of all weld symbols on the American Welding Society welding symbols chart.
2. Students will weld in all welding positions.
3. Students will correctly use ASME, AWS and API codes.
4. Students will perform and weld different pipe configurations according to specification.

**FIRST YEAR**

<table>
<thead>
<tr>
<th>First Semester</th>
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<tbody>
<tr>
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**SECOND YEAR**

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<table>
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<tr>
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<tr>
<td>WELD 4B Pipe, Tube Welding and Certification</td>
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<tr>
<td>Recommended Elective</td>
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</tbody>
</table>

Recommended Electives: CAM 10; CADD 14, 24; ENGR 10, 11; WELD 56.

### WELDING DESIGN & FABRICATION - MAJOR #8374

This certificate of achievement provides pre-employment training for an entry level job in the welding fabrication industry. Instruction in the design and fabrication of metal projects will be completed through the welding process. Skills will be taught in design, materials cost estimation and manufacturing processes.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**
1. Given an idea or description students will be able to design and plan the construction of one or more advanced metal fabricated projects.
2. From the design and specifications, students will be able to determine estimated steel weights and cost calculations.
3. Students will be able to demonstrate the proper safety precautions, setup and use of tools and equipment common to metal fabrication.
4. In the construction of their project, students will apply various types of welds with quality workmanship to assemble the steel components of advanced projects.
5. During the construction of their project, students will demonstrate the efficient use of time and materials to produce advanced projects.

**FIRST YEAR**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Units</th>
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<tbody>
<tr>
<td>AT 10 Technical Computer Applications</td>
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<tr>
<td>AT 130 Industrial Mathematics, or MA TH 201 Elementary Algebra</td>
<td>3-5</td>
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<tr>
<td>DRAFT 12 Drafting Practices</td>
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<tr>
<td>WELD 3A Welding Design and Fabrication</td>
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<tr>
<th>Second Semester</th>
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<tbody>
<tr>
<td>WELD 3B Intermediate Welding Design and Fabrication</td>
<td>5 Total 16</td>
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</table>
WELDING MULTI-PROCESS – MAJOR #8373

This certificate provides pre-employment training for an entry level job in the welding industry. Instruction in the areas of shielded metal, gas metal, gas tungsten and flux cored arc welding along with oxyacetylene cutting and plasma cutting will be presented. Skills will include welding in the flat, horizontal, vertical and overhead positions with the various processes as well as welding with aluminum and stainless steel with the Gas Metal and Gas Tungsten arc welding processes. Students will also use common power and hand tools to compliment related to the welding industry.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Students will be able to identify defects and discontinuities in their horizontal, vertical, and overhead welds according to AWS (American Welding Society) standards.
2. Given a power source, students will be able to properly set up and adjust the SMAW, GMAW, GTAW, FCAW and air carbon arc gouging machines to complete their lab assignments to AWS standards.
3. Given a drawing with weld symbols and specifications, students will be able to prepare their metal and perform the correct weld.

First Semester
AT 130 Industrial Mathematics................................. 3
WELD 2A Introduction to Welding Technology...................... 6
Total 9

Second Semester
DRAFT 12 Drafting Practices............................................. 3
WELD 2B Advanced Multi-Process Welding.......................... 5
Total 8

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Evaluate the role of women and gender relationships in various cross-and inter-cultural contexts.
2. Analyze the study of the intersections and complications of class, race, age, ethnicity, nationality, health/disability, and sexual identity as fundamental categories of social and cultural analysis.
3. Engage in in-depth examination of one aspect of women’s experience learned through (for example) a literary genre, a time period, a geographic region, or focus on a very narrow topic.
4. Connect ideas and concepts from various fields about oppression and patriarchy as these affect women to common themes or topics.
5. Evaluate the roles of women in society from a historical and sociological perspectives.

Program Requirements 20

REQUIRED CORE COURSES
WSTS 10 Changing Roles of Women................................. 3
WSTS/HS 25 Assertiveness Training.................................. 2
Total 5

Course Options: Select a minimum of 15 units
AMST 10 American Pluralism: A Search for Common Ground in a Multicultural Society................................. 3
WSTS/SOC 5 Sociology of Rape........................................... 3
WSTS/SOC 7 Domestic Violence: Abuse within the Family......... 3
WSTS/HIST 22 History of American Women.......................... 3
WSTS/CLS 24 La Chicana and Latina................................. 3
WSTS/ASAMER 30 Asian-American Women.......................... 3
WSTS/ENGL 36 Women’s Literature..................................... 3
WSTS/AFRAM 41 African-American Women’s Studies............... 3
WSTS/FN 43 Women’s Nutrition......................................... 2
WSTS/BA 44 Women in Management................................... 3
WSTS 47 Introduction to Lesbian and Gay Studies.................... 3

Note: Associate degree requirements are listed on page 35.

WOMEN’S STUDIES – MAJOR #7610

This is a transfer program designed to inform students of the historical and contemporary issues affecting women’s lives. Women's Studies offers a broad interdisciplinary approach to the study of women in society including their contrasting roles circumscribed by their culture and social institutions, their opportunities for self expression, achievement and self actualization, their relationships with parents, peers, intimates and children, and their concern for survival in a violent-prone society. Because Women's Studies is interdisciplinary, it also provides an academic background helpful to those planning careers in law, business, education and medicine.

2019-2020 Fresno City College Catalog
COURSE DESCRIPTIONS

Descriptions of courses offered at Fresno City College follow in alphabetical order.

Repeating a Course

It is the policy of this District that, unless specifically exempted by statute or regulation, every course, section or class, 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 and who meets such prerequisites as may be established pursuant to Subchapter 1, Chapter 6, Division 6, Title 5 of the California Code of Regulations, commencing with Section 55000.

Courses generally offered in only one of the two regular semesters are identified with a Fall (fall semester) or Spring (spring semester). Courses generally offered in only the evening program or during the summer session are so designated.

The State has mandated the maximum number of times a course may be repeated is three (3).

Key to Graduation or Transfer Status Designations

The identification of the transfer acceptance of Fresno City College courses by the California State University and University of California systems was one of the outcomes of the Fresno City College Student Success Project. Listed at the end of each course description, if applicable, are abbreviations identifying the transfer or graduation status of the course. The key to the abbreviations follows:

- **A**: Associate degree applicable
- **CSU**: Transferable to the California State University system
- **CSU-GE**: Meets the general education requirements for California State University transfer certification. Completion of all courses in the California State University General Education transfer certification pattern will permit a student to transfer to a campus in the California State University system without having to complete additional lower division general education courses after transfer.
- **I**: Meets the requirements of the Intersegmental General Education Transfer Curriculum (IGETC). Completion of all IGETC requirements will permit a student to transfer to a campus in either the California State University or University of California system without having to complete additional lower division general education courses after transfer.
- **UC**: Transferable to the University of California system

Schedule of Classes

The schedule of classes contains information necessary for registration and is available at the Admissions Office. Where no prerequisite is indicated, none is required except as explained in the section on “Prerequisites” which follows. Students should study the Schedule of Classes very carefully before completing registration.

Course Credit Limitation

A student shall not be granted credit for the completion of a course that is a prerequisite for another course previously completed by the student.

Prerequisites/Corequisites/Advisories

Students are urged to study the description of courses in this catalog to ensure that prerequisites are satisfied before registering for a course. Correct registration at an early date is important.

It is the student’s responsibility to be certain that they have met the necessary prerequisite(s) for any course taken. The student may be dropped from any class where it is verified that the necessary prerequisite has not been taken.

It should be understood by the student that whether or not a prerequisite is specifically stated, the instructional staff of this college assumes that each student who enrolls in a transfer-level course possesses sufficient competencies in the areas of reading, writing, and mathematics to be able to profit from instruction.

Advisory indicates that the institution recommends, but does not require, certain course work be taken prior to enrolling in the described course.

Corequisite indicates that the course must be taken simultaneously with another course if not already completed.

Prerequisite is defined to mean a condition of enrollment that a student must meet in order to register in a course or program. A student may challenge any prerequisite by completing the Prerequisite Challenge Form available in the Counseling Center.
Course Numbering System

1-99: Associate degree applicable courses that are also transferable to baccalaureate institutions
100-199: Associate degree applicable courses that are NOT transferable to baccalaureate institutions
200-299: Nondegree applicable credit courses
300-399: Noncredit courses

Course Classification System

Pursuant to revisions to the California Administrative Code, Title 5, Sections 55000 and 55062, all courses listed within the college catalog fall into one of the following classifications:

Credit, Degree Applicable
Credit, Nondegree Applicable
Noncredit

The majority of courses have retained their previous classification and are credit, degree applicable. The exceptions are as follows:

A. Credit, Nondegree Applicable

- Admin of Justice 204 Instructor Training/Academy Instructor
- Admin of Justice 211 Expandable Straight Baton Instructor
- Admin of Justice 217 Background Investigation
- Admin of Justice 219 Requalification–Basic Course
- Admin of Justice 220 Radar Operator
- Admin of Justice 222 Internal Affairs Investigator
- Admin of Justice 223 Basic Tactical Communication
- Admin of Justice 224 Interview and Interrogation
- Admin of Justice 225 Standardized Field Sobriety Tests (SFSTs)
- Admin of Justice 226 Advanced Roadside Impaired Driving
- Admin of Justice 227 ICI Gang Investigations Course
- Admin of Justice 227A ICI Major Drug Investigation Course
- Admin of Justice 227B ICI Criminal Investigator Core Course
- Admin of Justice 227C ICI Vehicle Theft Course
- Admin of Justice 227D ICI Advanced Gang Investigations
- Admin of Justice 228 AR-15 Armorer Course
- Admin of Justice 231 Tactical Firearms
- Admin of Justice 232A Firearms – Tactical Rifle
- Admin of Justice 232B Civil Procedures for Law Enf Officers
- Admin of Justice 232C CalGang End User Training
- Admin of Justice 232E Police Training Officer (PTO)
- Admin of Justice 232F Wilderness Tracking
- Admin of Justice 232G Electronic Weapons
- Admin of Justice 232H Driving (PSP)
- Admin of Justice 233I Court & Temporary Holding Facility
- Admin of Justice 233J Advanced Officer Course
- Admin of Justice 233K Arrest & Control Update
- Admin of Justice 233L Training Conference
- Admin of Justice 233M Patrol Canine Handler Update
- Admin of Justice 233N Chain of Custody Update
- Admin of Justice 233P Criminal Investigations
- Admin of Justice 233Q Training Conference - Gang Update
- Admin of Justice 233R Training Conference – Emotional Survival for Officers Update
- Admin of Justice 233S Introduction to Tactical Dispatcher Course
- Admin of Justice 233T Response to Active Shooters Update
- Admin of Justice 233U Training Conference - Gang Update
- Admin of Justice 233V Training Conference – Emotional Survival for Officers Update
- Admin of Justice 233W PC 832 Laws of Arrest
- Admin of Justice 233X PC 832 Firearms
- Admin of Justice 233Y Reserve Officer – Firearms Update Training
- Admin of Justice 233Z Reserve Officer – Vehicle Transition Update Training
- Admin of Justice 234A Reserve Officer – E.V.O.C. Update Training
- Admin of Justice 234B Reserve Officer – C.P.R./A.E.D. Update Training
- Admin of Justice 234C Reserve Officer – First Aid Update Training
- Admin of Justice 234D Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234E Reserve Officer – First Aid Update Training
- Admin of Justice 234F Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234G Reserve Officer – First Aid Update Training
- Admin of Justice 234H Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234I Reserve Officer – First Aid Update Training
- Admin of Justice 234J Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234K Reserve Officer – First Aid Update Training
- Admin of Justice 234L Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234M Reserve Officer – First Aid Update Training
- Admin of Justice 234N Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234O Reserve Officer – First Aid Update Training
- Admin of Justice 234P Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234Q Reserve Officer – First Aid Update Training
- Admin of Justice 234R Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234S Reserve Officer – First Aid Update Training
- Admin of Justice 234T Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234U Reserve Officer – First Aid Update Training
- Admin of Justice 234V Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234W Reserve Officer – First Aid Update Training
- Admin of Justice 234X Reserve Officer – Electronic & Impact Weapons Update Training
- Admin of Justice 234Y Reserve Officer – First Aid Update Training
- Admin of Justice 234Z Reserve Officer – Electronic & Impact Weapons Update Training

B. Credit, Degree Applicable

- Admin of Justice 205 Instructor Training/Academy Instructor
- Admin of Justice 206 Expandable Straight Baton Instructor
- Admin of Justice 207 Background Investigation
- Admin of Justice 208 Requalification–Basic Course
- Admin of Justice 209 Radar Operator
- Admin of Justice 210 Internal Affairs Investigator
- Admin of Justice 211 Basic Tactical Communication
- Admin of Justice 212 Interview and Interrogation
- Admin of Justice 213 Standardized Field Sobriety Tests (SFSTs)
- Admin of Justice 214 Advanced Roadside Impaired Driving
- Admin of Justice 215 Enforcement (ARIDE)
- Admin of Justice 216 ICI Gang Investigations Course
- Admin of Justice 217 ICI Major Drug Investigation Course
- Admin of Justice 218 ICI Criminal Investigator Core Course
- Admin of Justice 219 ICI Vehicle Theft Course
- Admin of Justice 220 ICI Advanced Gang Investigations
- Admin of Justice 221 AR-15 Armorer Course
- Admin of Justice 222 Tactical Firearms
- Admin of Justice 223 Firearms – Tactical Rifle
- Admin of Justice 224 Civil Procedures for Law Enf Officers
- Admin of Justice 225 CalGang End User Training
- Admin of Justice 226 Police Training Officer (PTO)
- Admin of Justice 227 Wilderness Tracking
- Admin of Justice 228 Electronic Weapons
- Admin of Justice 229 Driving (PSP)
- Admin of Justice 230 Court & Temporary Holding Facility
- Admin of Justice 231 Advanced Officer Course
- Admin of Justice 232 Arrest & Control Update
- Admin of Justice 233 Training Conference
- Admin of Justice 234 Patrol Canine Handler Update
- Admin of Justice 235 Instructor Training/Academy Instructor
- Admin of Justice 236 Expandable Straight Baton Instructor
- Admin of Justice 237 Background Investigation
- Admin of Justice 238 Requalification–Basic Course
- Admin of Justice 239 Radar Operator
- Admin of Justice 240 Internal Affairs Investigator
- Admin of Justice 241 Basic Tactical Communication
- Admin of Justice 242 Interview and Interrogation
- Admin of Justice 243 Standardized Field Sobriety Tests (SFSTs)
- Admin of Justice 244 Advanced Roadside Impaired Driving
- Admin of Justice 245 Enforcement (ARIDE)
- Admin of Justice 246 ICI Gang Investigations Course
- Admin of Justice 247 ICI Major Drug Investigation Course
- Admin of Justice 248 ICI Criminal Investigator Core Course
- Admin of Justice 249 ICI Vehicle Theft Course
- Admin of Justice 250 ICI Advanced Gang Investigations
- Admin of Justice 251 AR-15 Armorer Course
- Admin of Justice 252 Tactical Firearms
- Admin of Justice 253 Firearms – Tactical Rifle
- Admin of Justice 254 Civil Procedures for Law Enf Officers
- Admin of Justice 255 CalGang End User Training
- Admin of Justice 256 Police Training Officer (PTO)
- Admin of Justice 257 Wilderness Tracking
- Admin of Justice 258 Electronic Weapons
- Admin of Justice 259 Driving (PSP)
- Admin of Justice 260 Court & Temporary Holding Facility
- Admin of Justice 261 Advanced Officer Course
- Admin of Justice 262 Arrest & Control Update
- Admin of Justice 263 Training Conference
- Admin of Justice 264 Patrol Canine Handler Update
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<td>EMLS 265W</td>
<td>High Intermediate Academic Writing and Grammar</td>
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<td>EMLS 270</td>
<td>Pronunciation Improvement and Accent Reduction</td>
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<td>EMLS 284RW</td>
<td>Intermediate Academic Reading and Writing</td>
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<td>EMLS 285RW</td>
<td>High-Intermediate Academic Reading and Writing</td>
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<td>English 205</td>
<td>Reading Skills</td>
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<td>English 252</td>
<td>Writing Improvement</td>
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<td>English 277</td>
<td>Reading Comprehension</td>
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<td>English 278</td>
<td>Sentence and Grammar Writing</td>
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<td>English 281</td>
<td>Paragraph Writing</td>
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<td>English 282</td>
<td>Advanced Company/Chief Officer</td>
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<td>Fire Technology 200</td>
<td>Advanced Apparatus/Driver/Operator</td>
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<tr>
<td>Fire Technology 201</td>
<td>Advanced Firefighter</td>
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<tr>
<td>Fire Technology 202</td>
<td>Advanced EMT/EMT-Paramedic</td>
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<td>Fire Technology 203</td>
<td>Advanced Technical Rescue</td>
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<td>Fire Technology 204</td>
<td>Advanced Fire Prevention/Fire Investigation</td>
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<td>Firefighter II Part A</td>
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<td>Fire Technology 222B</td>
<td>Fire Apparatus Driver Operator 1A</td>
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<td>Fire Technology 230A</td>
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<tr>
<td>Fire Technology 230B</td>
<td>Fire Apparatus Driver/Operator – Aerial Apparatus</td>
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<td>Fire Technology 230C</td>
<td>Fire Apparatus Driver/Operator – Aerial Apparatus</td>
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<td>Fire Technology 230D</td>
<td>Fire Apparatus Driver/Operator – Wildland Fire Apparatus</td>
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<td>Fire Technology 230E</td>
<td>Firefighter Continuing Education</td>
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<td>Fire Technology 233</td>
<td>Fire Inspector 1A</td>
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<td>Fire Inspector 1C</td>
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<td>Fire Technology 240C</td>
<td>Chief Fire Officer 3A</td>
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<td>Chief Fire Officer 3C</td>
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<td>Fire Technology 260B</td>
<td>Chief Fire Officer 3D</td>
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<td>Fire Technology 260D</td>
<td>I-300, Intermediate ICS</td>
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<td>Fire Technology 261</td>
<td>Advanced Firefighter Topics</td>
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<td>Developmental Services 359</td>
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<td>EMLS 363RW</td>
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<td>Math 211S</td>
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<td>Math 250</td>
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<td>Math 255</td>
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<td>Math 260A</td>
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<td>Math 260C</td>
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<td>Math 260D</td>
<td>EMLS 370</td>
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<td>Math 277</td>
<td>NCLEX-RN Review</td>
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<td>Nursing, Registered 201</td>
<td>Successful Strategies for RN Students</td>
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<td>Nursing, Registered 202</td>
<td>RN Refresher Course</td>
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<td>Admin of Justice 369A</td>
<td>Intro to the Nursing Profession</td>
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<td>Air Conditioning 353</td>
<td>Care of the Childbearing and Parenting</td>
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<td>Applied Tech 340</td>
<td>Family Theory</td>
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<td>Applied Tech 350</td>
<td>Care of the Childbearing and Parenting</td>
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<td>Applied Tech 360</td>
<td>Family Simulation</td>
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<td>Automotive Technology 373</td>
<td>Perioperative Nursing</td>
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<td>Automotive Technology 374</td>
<td>Intro to Aerial Multimedia</td>
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<td>Aerial Multimedia II</td>
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<td>Automotive Technology 376</td>
<td>Credit, Nondegree SP ST</td>
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<td>Automotive Technology 377</td>
<td>Movement for the Production The Little Prince</td>
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<td>Business Administration 310</td>
<td>Applied Inter Reading for College and Careers</td>
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<td>Business Administration 333</td>
<td>Applied Inter Writing for College and Careers</td>
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<tr>
<td>Business Administration 335</td>
<td>Advanced Office Topics</td>
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<tr>
<td>Business Administration 336</td>
<td>Principles of Industrial Refrigeration</td>
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<tr>
<td>Business Administration 337</td>
<td>Introduction to Machine Shop</td>
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<td>Business Administration 338</td>
<td>Pneumatic &amp; Hydraulic Systems</td>
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<td>Business Administration 339</td>
<td>Mechanical Power Drive Systems</td>
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<td>Business Administration 340</td>
<td>Fork Lift Safety and Operation</td>
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<td>Business Administration 341</td>
<td>State Laws and Federal Regulations</td>
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<td>Business Administration 342</td>
<td>Safe Operation Fundamentals</td>
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<td>Business Administration 343</td>
<td>Operations of Commercial Vehicles I</td>
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<td>Business Administration 344</td>
<td>Operations of Commercial Vehicles II</td>
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<td>Business Administration 345</td>
<td>Introduction to Business</td>
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<td>Business Administration 346</td>
<td>Human Relations in the Workplace</td>
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<td>Business Administration 347</td>
<td>Computer Keyboarding</td>
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<td>Business Administration 348</td>
<td>Introduction to Word Processing</td>
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<td>Business Administration 349</td>
<td>Customer Service in the One-Person Office</td>
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<td>Business Administration 350</td>
<td>Office Asst Applications</td>
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<td>Business Administration 351</td>
<td>Office Asst Applications</td>
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<td>Business Administration 352</td>
<td>Introduction to Keyboarding</td>
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<td>Business Administration 353</td>
<td>Introduction to Filing</td>
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<td>Business Administration 354</td>
<td>Basic Office Communications</td>
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<td>Business Administration 355</td>
<td>Math Review and Ten-Key Calculator</td>
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<td>Business Administration 356</td>
<td>Job Search Documents</td>
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<td>Business Administration 357</td>
<td>Getting Started with Computers and Workplace Technology</td>
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<td>Business Administration 358</td>
<td>Differential Learn Diag</td>
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<td>Business Administration 359</td>
<td>Low Intermediate Academic Reading and Vocabulary</td>
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<td>EMLS 363R</td>
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<td>EMLS 370</td>
<td>Pronunciation Improvement and Accent Reduction</td>
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EMLS 384RW  Intermediate Academic Reading and Writing
EMLS 385RW  High Intermediate Academic Reading and Writing
English 300  Academic Learning & Literacy Skills
Graphic Communications 300A  Adobe ACA Certification
Graphic Communications 314  Adobe Acrobat Professional
Graphic Communications 315  Page Design
Graphic Communications 316  Web Design Techniques
Graphic Communications 317  Adobe Illustrator
Graphic Communications 320A  Intro to Applied Graphics – Adobe Tools
Graphic Communications 320B  Intro to Applied Graphics – Media
Graphic Communications 322  Digital Media
Graphic Communications 323  Video Editing – Adobe Premiere Pro
Graphic Communications 324A  Intro to 2-D Animation with Adobe Animate
Graphic Communications 324B  Intro to 2-D Animation – Harmony Software
Graphic Communications 325  CMS Web Design
Graphic Communications 327  Digital Video Production
Graphic Communications 330  Adobe InDesign/Professional Publishing
Graphic Communications 331  Intermediate Photoshop
Graphic Communications 332  Video Techniques
Graphic Communications 334  Introduction to 3-D Animation
Graphic Communications 339A  Introduction to Graphic Design
Graphic Communications 340A  Intermediate Graphic Design
Graphic Communications 341  Visual Communications
Graphic Communications 347  Introduction to Four Dimensional Design
Graphic Communications 351  Storyboarding
Graphic Communications 352  Adobe Lightroom
Graphic Communications 353  Adobe After Effects
Heat, Vent, & Air Conditioning 350  RETA/CARO Ready – EPA Section 608
Heat, Vent, & Air Conditioning 351  RETA/CARO Ready – Industrial Refrigeration
Marketing 301  Retail Sales and Customer Service Fundamentals
Math 312  Advanced Arithmetic for Pre STEM Students
Music 322  Senior Piano Skills
Music 326  Senior Vocal Skills
Music 327  Senior Guitar Skills
Music 339  Senior Opera Workshop
Music 340  Senior Skills Concert Band
Music 341  Senior Jazz Performance Ensemble
Music 342A  Senior Brass Skills
Music 342B  Senior Woodwind Skills
Music 342C  Senior String Skills
Music 342D  Senior Percussion Skills
Music 344  Senior Choral Skills
Music 348  Senior Latin Jazz Skills
Music 375  Senior Community Orchestra
Photography 323  Advanced Photoshop
ST 300  Tutoring
Special Studies 377  Zero Unit, No Grade Sp St
Theatre Arts 346  Senior Musical Performance Skills
Theatre Arts 347  Senior Musical Theatre Skills
Theatre Arts 348  Senior Play Production

Career & Technology Center Courses
Auto Mechanics 371  Engine Repair
Auto Mechanics 372  Engine Performance
Auto Mechanics 375  Automotive Brake Systems
Auto Collision Repair 371  Fund of Weld Tech & Working Sheet Metal
Auto Collision Repair 372  Body Work Technology
Auto Collision Repair 373  Automotive Refinishing Technology
Indust Training 371  Warehouse and Distribution Careers
Indust Training 372  Warehouse and Distribution Careers
Maint Mechanic 370  Fund-Weld/Machine Shop
Maint Mechanic 371  Fund Hydraul/Pneumatics
Maint Mechanic 372  Electrical Fundamentals
Manuf Mechanic 351  Introduction to Manufacturing
Manuf Mechanic 352A  Trade Mathematics
Manuf Mechanic 352B  Programmable Controllers
Manuf Mechanic 352C  Job Preparation
Manuf Mechanic 352D  Technical Report Writing
Manuf Mechanic 353A  Fluid Power Fundamentals
Manuf Mechanic 353B  Pneumatic Fundamentals
Manuf Mechanic 353C  Hydraulic Fundamentals
Manuf Mechanic 354A  Power Transmission
Manuf Mechanic 354B  Welding Fundamentals
Manuf Mechanic 354C  Electrical Fundamentals

SCCCD INTRA-DISTRICT ARTICULATED COURSES

The list of “in-lieu” courses that Clovis Community College, Fresno City College and Reedley College (which includes the Madera Community College Center and Oakhurst Community College Center) have agreed to articulate with one another to meet major requirements for an Associate in Arts degree, an Associate in Science degree, or a Certificate of Achievement is available at the Counseling Department.

Note: It is the student’s responsibility to verify with an academic counselor that the “in-lieu” course(s) successfully completed can meet the respective college’s: (a) local general education; (b) CSU GE pattern; (c) IGETC pattern; and/or (d) major requirements for the Associate Degree for Transfer (ADT). Do not ask a friend! Additional resources can be found in the respective college’s catalog and ASSIST.org.
COURSE DESCRIPTIONS

ACCOUNTING (ACCTG)

4A FINANCIAL ACCOUNTING
4 units, 4 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 12 or 15. A working knowledge of basic arithmetic is recommended.
Explores what financial accounting is, why it is important, and how it is used by investors and creditors to make decisions. Covers the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flows, internal controls, and ethics. (C-ID ACCT 110) (A, CSU, UC)

4B MANAGERIAL ACCOUNTING
4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Accounting 4A or equivalent.
Examination of how managers use accounting information in making decisions related to planning, directing, and controlling. Covers cost terms and concepts, cost control, accounting for costs in manufacturing and service organizations, cost behavior, cost structure, cost-volume-profit analysis, profit planning, standard costs, and capital budgeting. (C-ID ACCT 120) (A, CSU, UC)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to accounting. Collaborative learning objectives established specific to accounting. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

51 INTERMEDIATE ACCOUNTING
3 units, 3 lecture hours, 1 lab hour,
(Formerly Accounting 51 and 151)
PREREQUISITE: Accounting 4A or equivalent.

52 COST ACCOUNTING
3 units, 3 lecture hours, 1 lab hour,
(Formerly Accounting 52 and 152)
PREREQUISITE: Accounting 4B or equivalent.
Emphasis is given the management functions of planning, organizing, and controlling. In-depth examination of job order, process, and activity based cost systems, standard costs, the master budget, flexible budgeting, and capital budgeting. (A, CSU)

53 TAX ACCOUNTING
3 units, 3 lecture hours, 1 lab hour,
(Formerly Accounting 53 and 153)
PREREQUISITE: Accounting 4A or equivalent.
Covers federal (not state) individual income taxes including calculation of gross income, exclusions, deductions, losses, credits, and property transactions. Requires students to utilize a computerized tax system to reinforce concepts and methodology presented in the course. (A, CSU)

54A PRINCIPLES OF AUDITING
3 units, 3 lecture hours
PREREQUISITE: Accounting 4A or equivalent.
Explores the objectives and the techniques in the verification of business financial statements. Covers the duties, responsibilities, and professional ethics of the auditor, the auditor's report, and analysis of internal controls. (A, CSU)

56 PAYROLL ACCOUNTING
3 units, 3 lecture hours
PREREQUISITE: Accounting 4A or equivalent.
Covers payroll accounting including computing gross wages, tax withholdings and net pay, maintaining payroll records, journalizing payroll transactions, and preparing federal tax forms. (A, CSU)

57 GOVERNMENTAL ACCOUNTING
3 units, 3 lecture hours
PREREQUISITE: Accounting 4A or equivalent.
An examination of the accounting processes used within municipal county, state, and federal governments. Includes budgetary control, types of funds, and interpretation of reports. (A, CSU)
61  FORENSIC ACCOUNTING  
3 units, 3 lecture hours  
PREREQUISITE: Accounting 4A or equivalent. 
The action of identifying, recording, settling, extracting, sorting,  
reporting, and verifying past financial data or other accounting activities in  
settling current or prospective legal disputes or using such past financial  
data in projecting future financial data to settle legal disputes. (A, CSU)

70  QUICKBOOKS FUNDAMENTALS  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Accounting 4A. Eligibility for English 1A recommended.  
Introduction to accounting procedures and applications using  
QuickBooks including setting up companies, general ledger, sales  
processing, accounts receivable, purchasing, accounts payable, bank  
reconciliation, and payroll. (A, CSU)

73  SAGE 100 FUNDAMENTALS  
3 units, 3 lecture hours, 1 lab hour  
PREREQUISITE: Accounting 4A or equivalent.  
Introduction to accounting procedures and applications using  
Sage 100 software. Curriculum covers creating a new company and  
performing accounting functions using the general ledger, accounts  
receivable, accounts payable, payroll, and bank reconciliation modules.  
(A, CSU)

ADMINISTRATION OF JUSTICE (AJ) POLICE ACADEMY

204  INSTRUCTOR TRAINING/ACADEMY INSTRUCTOR CERTIFICATION COURSE  
1.5 units, 1.55 lecture hours, 0.32 lab hours,  
(Pass/No Pass), (Formerly Administration of Justice 104)  
PREREQUISITE: A California Peace Officer Standards and Training  
Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.  
Presentation skills and techniques that can be applied in any presentation environment. An overview of learning activities, facilitation of group activities, public speaking, and resources available to enhance presentations. Also, designed to increase the skills of Basic Academy Instructors in delivering POST Learning Domain curricula. Materials fee will be charged.

211  EXPANDABLE STRAIGHT BATON INSTRUCTOR  
0.4 unit, 8.5 lecture hours, 8.5 lab hours,  
(1 week), (Pass/No Pass)  
PREREQUISITE: A California Peace Officer Standards and Training  
Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.  
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:  
Knowledge of, and familiarity regarding officer safety related to police baton use; knowledge of proper and safe tactical movement related to police baton use; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under physical situations; knowledge of proper and safe arrest and control techniques related to police baton; knowledge of, and familiarity with, California Penal codes used in law enforcement use of force pertaining to the police baton; knowledge of effective verbal and non-verbal communication used in law enforcement during arrest procedure related to the police baton; knowledge of, and familiarity with, case law pertinent to law enforcement related to the use of the police baton; ability to perform CPR and First Aid techniques; knowledge of proper documentation in police reports pertaining to the use of the police baton.  
Train officers to instruct department personnel in the use of the expandable and straight baton. Materials fee will be charged.

217  BACKGROUND INVESTIGATION  
1.5 units, 33.6 lecture hours, (1 week),  
(Pass/No Pass), (Formerly Administration of Justice 117)  
PREREQUISITE: A California Peace Officer Standards and Training  
Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.  
Basic techniques and procedures for background investigators. Materials fee will be charged.
219 REQUALIFICATION—BASIC COURSE
6 units, 11.4 lecture hours, 5.4 lab hours, (9 weeks), (Pass/No Pass), (Formerly Administration of Justice 119)
PREREQUISITE: A POST Regular Basic Academy Certificate or equivalent or, for out-of-state, a letter of recommendation from POST.
No criminal record that disqualified an individual under 12021 California Penal Code.
Updated information in the use of force, laws of arrest, search and seizure, criminal law, related to the California POST Basic Academy. Materials fee will be charged.

220 RADAR OPERATOR
1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
- Possession of a valid California Driver's License; knowledge of, and familiarity with, California Vehicle codes related to speed laws; Knowledge of, and familiarity with, case law pertinent to the use of electronic speed tracking devices used in policing; knowledge with the safe positioning of patrol vehicles during surveillance of traffic on state highways.
- Proper operation of police radar devices including history of radar operation, principles of operation and laws relevant to radar operation. Materials fee will be charged.

222 INTERNAL AFFAIRS INVESTIGATOR
1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
- This course requires extensive knowledge of all types of police operations, because an internal investigator will be asked to investigate a wide variety of complaints. The investigator will need to possess deep operational knowledge because in part, he or she will be called upon to make judgments regarding the truthfulness and accuracy of individuals who are interviewed or investigated. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; knowledge of local, state and federal law violations pertaining to law enforcement officers working under color of authority. Ethical issues, legal considerations, investigative tools and procedures concerning public safety internal investigations. Procedures under California Government Code sections 3300 to 3311 and case law. Materials fee will be charged.

223 BASIC TACTICAL COMMUNICATION
0.4 unit, 8.4 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: None
Development, practice and delivery of effective conflict management of communication skills required for public safety personnel. Materials fee will be charged.

224 INTERVIEW AND INTERROGATION
1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
- Knowledge of, and familiarity with, California Penal and Vehicle codes use during policing interviews and interrogation to form proper questions related to crime events; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement interviewing and interrogation; knowledge of, and familiarity with, the United States Constitution pertaining to citizen's rights pertaining to police related detainments and questioning during law enforcement operations.
- Assist patrol officers in interviewing and interrogating persons involved in criminal investigations using behavioral analysis, observation skills, legal aspects, interview preparation, documentation and trial follow-up. Materials fee will be charged.
225 STANDARDIZED FIELD SOBRIETY TESTS (SFSTs)
0.5 unit, 16.8 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Develop skills in recognizing, interpreting and administering the Standardized Field Sobriety Tests, write reports, testify in court for cases involving driving under the influence.

226 ADVANCED ROADSIDE IMPAIRED DRIVING ENFORCEMENT (ARIDE)
0.5 unit, 16.8 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. Must possess a California POST SFST certificate issued by a POST certified presenter. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

ARIDE is required by the National Standardized Field Sobriety Testing Program Standards to enroll in a Drug Recognition Evaluator course, includes information on various drugs and/or alcohol and their effect on humans as it related to violations of federal, state and local laws.

227 ICI GANG INVESTIGATION COURSE
2 units, 2.34 lecture hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course.

Provides current law enforcement investigators with the information and skills to aid them in the successful investigation of gang related crimes, provide expert testimony, and in the use of informants, prison gangs, and gang subcultures; PC 186.22/Case Law; gang documentation/file management; interview & interrogation techniques; and the investigative benefit of social networking & technology, development of a personal curricula vitae, writing a search warrant, and building a gang prosecution case.

227A ICI MAJOR DRUG INVESTIGATION COURSE
1.5 units, 1.5 lecture hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 225, 226, and 270B.
A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weaponry/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

The Robert Presley Investigation (ICI) Major Drug Investigation Course is one of 14 ICI Foundation Specialty Courses within the Robert Presley Institute of Criminal Investigation. This course is designed for peace officers who are currently assigned or will be assigned to investigate major drug investigations. The course covers drug in field training, undercover surveillance, and counter surveillance. Provides qualifications to identify, arrest, and successfully prosecute various major drug violations. This course is designed to enhance the effectiveness of the individual criminal investigator's skills in performing the multi-disciplined, multi-leveled tasks necessary to successfully conduct comprehensive major drug investigations. Instruction in this course is provided through a coordinated, experience-based adult learning approach.

227B ICI CRIMINAL INVESTIGATOR CORE COURSE
2 units, 2.34 lecture hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B.
This is the core course for the Robert Presley Institute of Criminal Investigation (ICI) and is the prerequisite program for all subsequent ICI specialty courses. The ICI is designed to improve the effectiveness of individual criminal investigators by providing instruction through a coordinated, experience-based adult learning approach which addresses instruction related to crime scene management, working with victims and witnesses, case management and documentation, interviewing and interrogation skills, search and seizure issues, surveillance techniques, case reporting, informant management, search warrant preparation, courtroom testimony, and media relations.
227C ICI VEHICLE THEFT COURSE
0.5 unit, 2.33 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

This ICI foundation specialty course provides investigators with the basic training techniques, skills and information necessary to conduct successful vehicle theft investigations. This course includes instruction on the following types of vehicle theft investigations: vehicle theft by fraud; Vehicle Identification Number (VIN) switched vehicles; salvaged vehicles, and thefts of construction equipment, watercraft, commercial vehicles and motorcycles. This course also provides students with training related to the preparation and execution of search warrants, and vehicle theft investigative resources such as NICB, insurance companies, financial corporations and/or vehicle dealerships. At the conclusion of this course the student/investigator will be able to: interpret and apply vehicle theft related laws; understand the role and responsibilities of the vehicle theft investigator; determine if a vehicle has been VIN switched; determine if a vehicle has been stolen; utilize appropriate investigative resources to assist in vehicle theft investigations; obtain the identification of a vehicle with the VIN removed; and successfully prepare for and assist in the prosecution of cases involving vehicle theft.

227D ICI ADVANCED GANG INVESTIGATIONS
0.5 unit, 2.33 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provides investigators with the information and skills to successfully investigate gang related crimes and testify as a gang expert. The course is designed for active, hands-on participation by all students. Course work will include preparation for submitting a gang wiretap affidavit, understanding gang association warrants, a review of both prosecution and defense strategies in gang cases, and preparing for expert testimony. The course will conclude with a mock-courtroom exercise, administered by gang District Attorneys. The student will have an opportunity to practice their gang expert testimony skills with both direct and cross examination.

233 AR-15 ARMORER COURSE
0.4 unit, 1.4 lab hours, (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; knowledge of, and familiarity with, the everyday use, vehicle racking, storage environments, and handling of the patrol rifle; ability to achieve a qualifying score during AR-15 shooting to ensure scoping of a rifle; knowledge of, and familiarity with, the nomenclature of a common patrol rifle used in policing; the ability to manipulate small tools during assemble and disassemble of the patrol rifle; knowledge of proper and safe tactical movement while carrying a AR-15 patrol rifle; knowledge of, and familiarity with, case law pertinent to law enforcement patrol rifles and legal adjustments; ability to perform CPR and First Aid techniques.

Knowledge, skill, and abilities to perform disassemble, assemble, inspection, repair, installation of parts, safety check, use proper tools, function check the AR-15/M-16 patrol rifle.
233A TACTICAL FIREARMS (PSP)
0.1 unit, 0.58 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

- Knowledge of proper and safe firearms handling; due to transition drills satisfy PC 33220(b); ability to achieve a qualifying score during handgun shooting; ability to achieve a qualifying score during shotgun training; knowledge of, and familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of, and familiarity with, the use of force continuum related to policing; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling while transitioning weapons; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, use of force continuum and weapon selection used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

- Knowledge of tactical handgun, shotgun and rifle proficiency with techniques, exercise, and course-of-fire focusing on, weapons safety, drawing techniques, shooting fundamentals, target identification, speed, accuracy and effectiveness under stress, movement conditions, transitioning and clearing malfunctions.

233B FIREARMS – TACTICAL RIFLE
0.3–0.4 unit, 0.93–1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

- Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR-15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of, and familiarity with, California Penal codes used in law enforcement pertaining to use of force; knowledge of case law pertaining to use of force in policing; knowledge of, and familiarity with, use of force continuum and weapon selection used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

- Designed to satisfy Penal Code 33220(b) requirements by the State of California for law enforcement officers to carry and use a patrol rifle.

233C CIVIL PROCEDURES FOR LAW ENFORCEMENT OFFICERS
0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

- Knowledge of, and familiarity with, California Penal codes used in law enforcement pertaining to enforcement of court orders, property levy and till taps; knowledge of, and familiarity with, community policing and problem-solving pertaining to civil disputes; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement in the civil process; ability to read court orders pertaining to policing; knowledge of, and familiarity with, officer safety techniques used in disturbance calls; knowledge of the NCIC system related to pre-investigation of action plans prepared by law enforcement.

- Enforcement of civil procedures common to Law Enforcement, such as, landlord tenant disputes, till taps, property levies, evictions, restraining orders, and repossessions.
233D CALGANG END USER TRAINING
0.3 unit, 0.93 lab hours, (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Students will need to possess deep operational knowledge of gang investigation in policing. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures in policing. Knowledge of, and familiarity with, current case law related to gangs; knowledge of report writing pertaining to policing; knowledge of chain of custody and evidence processing pertaining to policing; knowledge of basic computer skills; possession of a NCIC clearance pertaining to police investigations.

Introduces students to the Cal Gangs computer system, data entry, data queries, link analysis, mapping and related issues.

233E POLICE TRAINING OFFICER (PTO)
1 unit, 10 lecture hours, 32 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police operations, because as first line police training officer you must have a wide variety of law enforcement daily operations. The first line training officer will need to possess deep operational knowledge because in part, he or she will be called upon to make judgments regarding the in-field training of police officers. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge, and familiarity with, Penal and Vehicle codes; knowledge, and familiarity with, Health & Safety codes; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; knowledge of the rank structure in policing; knowledge, and familiarity of, local, state, and federal laws, and policies, pertaining to law enforcement.

Meets POST requirements for the training of Patrol Training Officers. Topics include PTO program goals, objectives, role of PTO, expectations of the PTO, adult learning, coaching and training methods.

233F WILDERNESS TRACKING
0.3 unit, 20.8 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver’s License; Knowledge of, and familiarity with, the Incident Command System used by public safety; Knowledge of GPS handheld devices; experience with survival techniques and equipment used in woodland and mountainous terrain; Knowledge of, and familiarity with, backpacking equipment used in mountainous terrain; Knowledge of, and familiarity with public safety radio use; currently certified to perform CPR and First Aid; Knowledge of, and familiarity with, officer safety techniques pertaining to contacting wanted suspect hiding in the wilderness.

Train students involved in active search and rescue or wanted suspects, in techniques of person tracking in mountainous terrain, both day and night operational tracking.
233G ELECTRONIC WEAPONS
0.1 unit, 6.2 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of range safety guidelines associated with non-lethal weapons; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers during arrest of resistive subject situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement use of non-lethal weapons; knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.

Training in use of conducted energy weapons including TASER X26E, X26P and effects of electricity on biological systems, central nervous system and case law regarding the use of electronic weapons.

233H DRIVING (PSP)
0.1 unit, 0.06 lecture hours, 0.41 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Possession of a valid California Driver’s License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge of how perception and reaction time affects a vehicle’s total stopping distance; knowledge of, and familiarity with, the importance and proper use of safety belts in a law enforcement vehicle; knowledge of Fresh and Stale lights at intersections; knowledge of a space cushion surrounding a vehicle; knowledge of the components of a vehicle inspection; knowledge of and familiarity with, the use of code 3 light and siren equipment commonly used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Meets the 4-hour PSP requirements for patrol vehicle operations, course will consist of both slow speed exercises and pursuit training.

233I COURT & TEMPORARY HOLDING FACILITY
0.1 unit, 0.46 lab hours, (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate, or California Standards of Training for Corrections Basic Course, completion of a POST PC 832 course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of the Penal code, Vehicle code, Health & Safety codes related to the degrees of crime related to an inmate in a detention facilities; knowledge of officer safety techniques related to the movement of arrestees in confined areas; knowledge of case laws related to the housing of juvenile vs. adults in detention facilities; knowledge of courtroom procedures related to inmate movements within a courthouse; knowledge of First Aid procedures related to non-handgun suicides.

Meets requirements of Section 1024, Title 5, California Code of Regulations for training personnel responsible for supervision of inmates in, and supervisors of, a court holding or temporary holding facility regarding jail standards, jail operations, liability, inmate segregation, suicide prevention, emergency procedures and planning.
233J ADVANCED OFFICER COURSE
0.1 unit, 0.06 lecture hours, 0.24 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of blood borne pathogens as they pertain to law enforcement services; Certified to carry and deploy a law enforcement TASER; ability to perform CPR and First Aid techniques; knowledge of, and experience with, law enforcement suspect containment during criminal in-progress crimes; knowledge of, and familiarly with, proper and safe tactical movement pertaining to policing; knowledge of, and experience with, law enforcement mindset during policing operations; Knowledge of, and experience with, proper police driving techniques. 5-hour course, updated instruction on officer mindset, perimeters, yearly updates for electronic weapons and California OSHA blood borne pathogens.

233K ARREST & CONTROL UPDATE
0.1 unit, 0.06 lecture hours, 0.24 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to resistive subjects; knowledge of, and familiarity with, control holds and takedowns used in policing; knowledge of, and familiarity with, the principals of Awareness, Balance and Control pertaining to policing; knowledge of, and familiarity with, cursory search and full arrest searches in policing; knowledge of body parts as personal weapons acceptable to policing; knowledge of, and familiarity with common concealed weapons on subjects pertinent to policing; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of proper and safe firearms reten­tions; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and disaster situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement; knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.

5.2 hour course meets POST PSP requirements for arrest and control technique update for California law enforcement officers.

233L TRAINING CONFERENCE
0.1-0.3 unit, 8.4-16.8 lab hours, (1 week), (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police operations, due to the large umbrella of liability covering a wide variety of law enforcement daily operations. The student will need to possess deep operational knowledge because in part, he or she will be called upon to make judgements regarding the involvement of police operations. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; Knowledge of the rank structure in policing; knowledge, and familiarity of, local, state, and federal laws, and policies, pertaining to law enforcement.

8-16 hour course provides an overview of managing risk in the high-risk world of law enforcement operations, focusing on civil liability, training, leadership and updated case studies.
233M PATROL CANINE HANDLER UPDATE
0.5 unit, 1.8-2.23 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. Certified law enforcement canine handler. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Course contains legal updates, safety concerns, obedience training, canine personalities, handling techniques, search techniques, environmental concerns, person apprehensions, first aid, and documentation for handlers of patrol canines.

233P SEARCH & RESCUE INCLEMENT WEATHER UPDATE
0.5 unit, 1.8-2.23 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Law Enforcement search and rescue techniques for rescue of persons in swift water environments, snow, inclement weather, various terrains and interaction with helicopter or air support.

233N SEARCH AND RESCUE TRAINING UPDATE
0.5 unit, 1.78-2.34 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Law Enforcement search and rescue techniques, rope training, rescue equipment, patient packaging, navigation, tracking, survival skills and field operations.

233O UNDERWATER SEARCH AND RECOVERY UPDATE
0.5 unit, 1.8-2.23 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. Students must be advanced law enforcement certified SCUBA divers. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Underwater search and recovery techniques for SCUBA diving in poor conditions, search and navigating underwater, and utilizing a helicopter during a search.

233Q INTRODUCTION TO TACTICAL DISPATCHER COURSE
0.4 unit, 1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 278 and 284.
Enhance existing public safety dispatcher skills of a seasoned dispatcher to provide advanced dispatching communication knowledge to assist patrol/SWAT officers during high priority critical incidents.

233R RESPONSE TO ACTIVE SHOOTERS UPDATE
0.1 unit, 0.58 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review and update law enforcement responses to active shooter situations that call for single/multiple officer teams, utilizing proper weapon handling, proper room entry techniques, and single/multiple threat assessments and threat contacts.
233S TRAINING CONFERENCE – GANG UPDATE
0.1-0.3 unit, 0.47-0.97 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Review and update law enforcement responses to current gangs, gang internal workings, criminal actions, case follow-up and officer safety concerns updating law enforcement officers and investigators.

233U TRAINING CONFERENCE – EMOTIONAL SURVIVAL FOR OFFICERS UPDATE
0.1-0.3 unit, 0.47-0.93 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Review and update how current law enforcement officers cope with stress, physical and emotional challenges.

234 ADULT CORRECTIONS OFFICER CORE COURSE
6 units, 4.5 lecture hours, 5.77 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: None.
Satisfies the requirements for Standards and Training for Corrections (STC), basic correctional academy training.

234A ADULT CORRECTIONS OFFICER CORE ENHANCEMENT COURSE
1 unit, 0.44 lecture hour, 1.9 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 234. Successful completion of Administration of Justice 234 when taken in tandem without a separation between courses (Administration of Justice 234 and Administration of Justice 234A).
This course is designed as an enhancement to the 176 hour Adult Corrections Core. The course provides training in the following subjects: CPR and First-aid, Chemical Agents, PREA, Carotid Restraint, PepperBall, Excited Delirium, and ADA Issues.

234B PC 832 LAWS OF ARREST
1.5 units, 1.14 lecture hours, 1.2 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: None.
Basics in arrest and control techniques and knowledge of California laws related to the requirements of Section 832 (Level III) of the California Penal Code.

234C PC 832 FIREARMS
0.4 unit, 1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course.
Basic use of firearms to fulfill the requirements of section 832 of the California Penal Code.

235 RESERVE OFFICER – FIREARM UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Updates firearms skills related to reserve peace officers working with full-time officers, designed for working reserve officers qualified to carry law enforcement firearms.
235A RESERVE OFFICER – VEHICLE TRANSITION UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identifies the various vehicle handling/driving differences from standard Ford sedans to All-wheel drive Explorers used in law enforcement vehicles, handling and equipment placement issues.

235B RESERVE OFFICER DRIVER AWARENESS ISSUES – BELOW 100 UPDATE
0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Review common driving issues encounter by patrol officers that cause accidents, injuries, deaths and review positive driving practices to reduce officer driving death.

235C RESERVE OFFICER – E.V.O.C. UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provide instruction on the proper driving techniques to maneuver a vehicle at both slow speeds and high speeds. Allowing students to get first-hand experience at driving at slow speed and high speed under different circumstances and having to utilize the radio and stay aware of other vehicles on the roadway.

235D RESERVE OFFICER – C.P.R/A.E.D. UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18-0.34 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provides updated information or techniques necessary to perform C.P.R. and A.E.D. during medical emergencies in the field for reserve officers.

235E RESERVE OFFICER – FIRST AID UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Provide working reserve officers updated information and techniques common to infield injuries encountered by public safety.

235F RESERVE OFFICER – ELECTRONIC & IMPACT WEAPONS UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Techniques for the proper use of expandable batons and electronic weapons, as well as legal update information for those weapons used by public safety.

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235G RESERVE OFFICER – REPORT WRITING UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18-0.28 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Information on writing skills associated with the documentation of public safety incidents, proper sentence structure, writing styles, formatting and required information for prosecution of incidents or crimes.

240 ARREST AND CONTROL UPDATE
0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Review and update how current law enforcement officers cope with stress, physical and emotional challenges.

240A TACTICAL RIFLE FOR LAW ENFORCEMENT
0.3 unit, 0.93 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course.
Designed to train public safety officer who can possess law enforcement specialty rifles, rifle safety, malfunction drills, basic tactics for deployment of rifles within the scope of the public safety environment. Meets requirement of Penal Code 33220(b) and POST regulation 1081.

240B FIREARMS UPDATE
0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course.
Update training for public safety officers who carry sidearm, transition training, judgement, shooting techniques, building upon current knowledge and training.

240D DRIVER TRAINING – EMERGENCY VEHICLE UPDATE
0.1 unit, 0.36 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Student must have the legal authority to possess the required law enforcement weaponry involved in this course. Student must possess a valid California Driver's License.
Provides minimum topics for driver training/awareness required by POST perishable skills program, pursuit intervention, legal issues, and vehicle dynamics. Course is building on possessed past experience and training in driving a police vehicle.

240E BIAS BASED POLICING UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Review and update of bias based policing and racial profiling issues related to Law Enforcement.
240F PRINCIPLED POLICING UPDATE
0.1 unit, 0.47 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Principled policing teaches police officers to work with people in a way that emphasizes respect, listening, neutrality and trust while also addressing the common implicit biases that can be barriers to this approach.

240G FIRST AID FOR MEDICAL INJURIES UPDATE
0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identify medical emergencies including childbirth, and provide basic life support skills and treatment.

240H CPR/AED UPDATE TRAINING
0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identify sudden cardiac arrest and demonstrate proper CPR and use of the Automatic External Defibrillator.

240I FIRST AID FOR TRAUMATIC INJURIES UPDATE
0.1 unit, 0.06 lecture hour, 0.18 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Identify priorities in patient assessment and treatment of traumatic injuries confronted by law enforcement field officers.

243 ARREST AND CONTROL UPDATE FOR PROBATION OFFICERS
0.1 unit, 0.47 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Standards and Training for Corrections Probation Officer CORE course certificate issued from an accredited training provider, or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted SCTC and/or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Arrest and control techniques directed toward probation officers working in the field and within detention facilities.

243A JUVENILE INSTITUTION ORIENTATION TRAINING
0.5 unit, 1.8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 286.
Orientation skills essential for newly hired Juvenile Correctional Officers to meet performance standards and to obtain benefits from subsequent on-the-job training.

243B EXPANDABLE BATON UPDATE FOR PROBATION OFFICERS
0.1 unit, 0.46 lab hour, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285. Prior to beginning this course, students must already be familiar with the nomenclature, control holds, take downs, strikes, patterns of movement, and the California Penal Codes used in law enforcement pertaining to the expandable baton.

Expandable baton techniques directed toward probation officers working in the field.
243C PEPPER SPRAY TRAINING FOR PROBATION OFFICERS
0.1 unit, 0.46 lab hour, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285 and 286.
Pepper spray deployments and decontamination for probation officers working in the field, and juvenile correctional officers working in a juvenile institution.

243D BASIC USE OF FORCE OPTIONS FOR PROBATION OFFICERS
0.1 unit, 0.46 lab hour, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285 and 286.
Force options training for probation officers and juvenile correctional officers. Understanding of case law, arrest and control techniques, pepper spray, restraints, and restraint techniques.

243E TACTICAL APPROACHES AND ENTRIES FOR PROBATION OFFICERS
0.3 unit, 0.93 lab hour, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285. Legal understanding of use of force and experience handling a law enforcement firearm. Carries a firearm as part of issued equipment.
Tactical approaches and entries into a residence or building, clearing rooms and addressing potential threats. Simunitions equipment is utilized for probation officers working in the field in this training.

243F FIELD TACTICS UPDATE FOR PROBATION OFFICERS
0.1 unit, 0.46 lab hour, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285. Experience handling and shooting a law enforcement firearm. Carries a firearm as part of issued equipment.
Field tactics update for probation officers conducting probation checks on probationers. Simunitions equipment is utilized for approach and entry scenario training.

243G OFFENDER BEHAVIOR MODIFICATION
0.4 unit, 1.4 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 285 and 286. Working in a probation assignment that supervises high-risk felony offenders. The three components of Cognitive Self-Change, Social Skills, and Problem Solving are the nexus to Thinking for a Change offender behavior modification. Directed toward officers working in a juvenile detention facility or probation officers in the field.

245 ACADEMY INSTRUCTOR CERTIFICATION COURSE UPDATE
0.1 unit, 8.4 lab hours, (1 week),
(Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Dispatcher Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Updated teaching techniques related to teaching in the Basic Regular Course (Police Academy) that satisfies the POST PAM Section 1070 requirements.

245A ARREST & CONTROL TECHNIQUES UPDATE
0.1 unit, 0.06 lecture hours, 0.23 lab hours,
(Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Knowledge of, and familiarity regarding officer safety related to resistive subjects; knowledge of, and familiarity with, control holds and takedowns used in policing; knowledge of, and familiarity with, the principals of Awareness, Balance and Control pertaining to policing; knowledge of, and familiarity with, cursory search and full arrest searches in policing; knowledge of body parts as personal weapons acceptable to policing; knowledge of, and familiarity with common concealed weapons on subjects pertinent to policing; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of proper and safe firearms retention; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and disaster situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement; knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.
Arrest & Control updated techniques to satisfy POST PAM 2-year cycle requirements for sworn law enforcement officers.
245B BATON USER UPDATE
0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
- Knowledge of, and familiarity regarding officer safety related to police baton use;
- Knowledge of proper and safe arrest and control techniques related to police baton use;
- Knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under physical situations;
- Knowledge of proper and safe arrest and control techniques related to police baton use;
- Knowledge of, and familiarity with, California Penal codes used in law enforcement use of force pertaining to the police baton;
- Knowledge of effective verbal and non-verbal communication used in law enforcement during arrest procedure related to the police baton;
- Knowledge of, and familiarity with, case law pertinent to law enforcement related to the use of the police baton; ability to perform CPR and First Aid techniques; knowledge of proper documentation in police reports pertaining to the use of the police baton.
Update users of the police straight or expandable baton that have been previously certified to carry a police baton.

245C CANINE AGITATOR
0.1 unit, 8.4 lab hours, (1 Week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
- Course requires extensive knowledge of all types of police crime scenes, because as a generalist detective you have a wide variety of investigative responsibilities. A detective relies on their past academy and patrol experience with knowledge and familiarity with the Penal code, Vehicle code, Health & Safety code, knowledge and familiarity with case law pertaining to policing; knowledge and familiarity with collection of evidence; knowledge and familiarity with criminal suspect's rights; knowledge and familiarity with the chain of evidence in policing; knowledge and familiarity with fingerprint identification, impressions, collection procedures pertaining to policing; knowledge and familiarity with legal authority; knowledge and familiarity with generating crime scene notes that document observations, scene conditions and investigative actions pertaining to policing; knowledge and familiarity with systematic methods to search crime scenes pertaining to policing; knowledge and familiarity with crime scene diagramming; knowledge and familiarity with interviewing and interrogation of subjects pertaining to policing; certificate to use NCIC as part of criminal investigations.
- Training for new detectives covering, case management, interrogation, interviewing, crime scene, media relations, warrants, evidence and other related subjects.
245E DRIVER AWARENESS INSTRUCTOR
0.4 unit, 25.2 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Possession of a valid California Driver’s License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving; knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.
Satisfies POST PAM 1070 requirement for Driver Awareness Instructor, driving simulators, skid pan, code-3, and driving courses.

245F DRIVER AWARENESS UPDATE
0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Possession of a valid California Driver’s License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving; knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.
Satisfies POST PAM Perishable Skills 2-year update requirements, slow speed turning, steering, parking, backing and turn around.

245G DRIVER TRAINING INSTRUCTOR
0.5 unit, 42 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Possession of a valid California Driver’s License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving; knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.
Satisfies POST PAM 1070 requirement to teach law enforcement PIT.

245H PIT INSTRUCTOR
0.1 unit, 8.4 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Possession of a valid California Driver’s License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving; knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.
Satisfies POST PAM 1070 requirements to teach law enforcement PIT.
245I DRIVER TRAINING/EVOC/PIT UPDATE
0.1 unit, 0.46 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

- Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving; knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge and familiarity with, case law pertinent to law enforcement emergency driving; ability to perform CPR and First Aid techniques.

Satisfies POST PAM requirement for driver's update, legal aspects, implementation of PIT and EVOC.

245J DRIVER TRAINING SIMULATOR
0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

- Course requires extensive knowledge of driving a marked law enforcement vehicle in all types of environmental considerations and response classifications, such as code 3. Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving; knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge and familiarity with case law pertinent to law enforcement emergency driving; knowledge and familiarity with proper steer and braking techniques; knowledge and familiarity with interior patrol vehicle restrictions/limitations while driving such vehicles; knowledge and familiarity with proper radio use and procedures during emergency responses or vehicle pursuits.

Using a law enforcement training simulator, train students in seatbelt, steering, breaking, weight transfer, road position, speed judgment, throttle usage, defensive driving in various scenarios.

245K DRIVING/FORCE OPTION SIMULATOR
0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)

PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

- Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarity with Penal and Health & Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with use of police handcuffing procedures; knowledge and familiarity with the use of the police baton; knowledge and familiarity with police handguns, shotguns and rifles; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; Possession of a valid California Driver's License; knowledge of, and familiarity with sustained physical performance demands and stress on law enforcement officers under emergency driving situations; knowledge of, and familiarity with, California Vehicle codes used in law enforcement emergency and pursuit driving, knowledge of effective radio communication used in law enforcement pursuit driving; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge and familiarity with case law pertinent to law enforcement emergency driving; knowledge and familiarity with proper steer and braking techniques; knowledge and familiarity with interior patrol vehicle restrictions/limitations while driving such vehicles; knowledge and familiarity with proper radio use and procedures during emergency responses or vehicle pursuits.

Satisfies the POST PAM requirement for updated simulator training in driving and use of force for law enforcement.
245L DRUG FACILITATED SEXUAL ASSAULT
0.3 unit, 16.8 lab hours, (1 week),
(Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police crime scenes, because as a generalist patrol officer you have a wide variety of investigative responsibilities. Patrol officers and detectives require an extensive knowledge of investigating sexual assaults incidents. A officer relies on their past academy and patrol experience with knowledge and familiarity with the Penal code, Vehicle code, Health & Safety code, knowledge and familiarity with case law pertaining to policing; knowledge and familiarity with collection of evidence; knowledge and familiarity with criminal suspect’s rights; knowledge and familiarity with the chain of evidence in policing; knowledge and familiarity with fingerprint identification, impressions, collection procedures pertaining to policing; knowledge and familiarity with legal authority; knowledge and familiarity with generating crime scene notes that document observations, scene conditions and investigative actions pertaining to policing; knowledge and familiarity with systematic methods to search crime scenes pertaining to policing; knowledge and familiarity with crime scene diagramming; knowledge and familiarity with interviewing and interrogation of subjects pertaining to policing; certificate to use NCIC as part of criminal investigations.

Training for law enforcement patrol officers and detectives related to sexual assaults related to the use of drugs to commit sexual assault, drugs, evidence collection, suspect interview, and related laws.

245M ELECTRONIC WEAPONS
0.1 unit, 0.06 lecture hours, 0.18 lab hours,
(Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of range safety guidelines associated with non-lethal weapons; knowledge of Penal code sections related to use of force in policing; knowledge of emotional response during an arrest process; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers during arrest of resistive subject situations; knowledge of proper and safe arrest and control techniques; knowledge of, and familiarity with, the use of force continuum pertaining to policing; knowledge and ability to use handcuffing commonly used in policing; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement; knowledge of, and familiarity with, case law pertinent to law enforcement use of non-lethal weapons; Knowledge of report writing related to police use of force reports; ability to perform CPR and First Aid techniques.

Satisfies the requirement for law enforcement officers to carry a TASER, nomenclature, case law, medical considerations, and deployment.

245N FIREARMS INSTRUCTOR UPDATE
0.4 unit, 25.2 lab hours, (1 week),
(Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Updates currently certified POST Firearm Instructors, course contains, psychology of survival for trainers, pistol update, rifle update, shotgun update, adult learning concepts, instructor liability and vehicle tactics.
2450 TACTICAL HANDGUN
0.1 unit, 0.06 lecture hours, 0.25 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Handgun training, marksmanship, loading drills, shooting on the move, multiple targets, threat assessment, barricades, team shooting, shooting from vehicles.

245Q TACTICAL RIFLE UPDATE
0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Update methods of tactical rifle, weapon safety, shooting positions, sight picture, tactical considerations, sling carry positions, moving target methods and shooting drills.
245R TACTICAL RIFLE 1ST RESPONDER
0.3 unit, 0.93 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during handgun shooting; ability to achieve a qualifying score during shotgun training; knowledge of and, familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling while transitioning weapons; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

1st Responders tactical rifle training, deployment considerations, threat assessment, barricade shooting, distance shooting, stress shooting, team and tandem shooting.

245S TACTICAL SHOTGUN
0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during handgun shooting; ability to achieve a qualifying score during shotgun training; knowledge of, and familiarity with, sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling while transitioning weapons; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Advanced handgun, safety, officer survival, combat shooting, mindset, handgun capabilities, multiple targets, multiple targets and distance shooting.
245U FIRST AID & CPR REFRESHER
0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. These skills and knowledge base are related to adopted POST and/or industry standards. Students will need to have completed a Law Enforcement First Aid and CPR course to attend this refresher course. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Refresh legal issues, responding to emergencies, control bleeding, using an Automated External Defibrillator, basic First Aid and CPR demonstration.

245V FORCE OPTION SIMULATOR
0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarity with Penal, Vehicle and Health & Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.

Simulator environment for patrol officers to improve use of force weaponry, verbalization, decision making during use of force suspect contacts.

245W LESS LETHAL WEAPONS
0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:
Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarity with Penal, Vehicle and Health & Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.
Patrol and SWAT officer less lethal weapons, related laws, nomenclature, deployment factors, transitioning, ammunition, storage, tactical considerations, storage and documentation.
245X MENTAL ILLNESS AWARENESS REFRESHER
0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Dispatcher Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with subjects with mental illnesses during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarity with Penal and Health & Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal tactical communication; knowledge and familiarity with medical response resources related to subjects with mental illnesses.

Contact by law enforcement officers with mental illness conditions, causes, definitions, schizophrenia, Bipolar disorder, treatment approaches and practical exercise.

245Y OFFICER SAFETY/FIELD TACTICS
0.4 unit, 1.4 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarity with Penal, Vehicle and Health & Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.

Tactics for patrol officers’ officer safety during daily operations, firearms, arrest & control, searching techniques, K-9s, officer down and officer rescue.

245Z OFFICER SAFETY/FIELD TACTICS UPDATE
0.1 unit, 0.06 lecture hours, 0.18 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police interactions with resistive subjects during law enforcement contacts, a law enforcement officer has a wide variety of contacts that they by law or policy must respond to, a student must have knowledge of multitasking within short periods of time, knowledge and familiarity with Penal, Vehicle and Health & Safety codes, knowledge and familiarity with safe tactical movement, knowledge and familiarity with verbal and non-verbal communication; knowledge and familiarity with case law pertinent to police use of force; knowledge and familiarity with arrest and control techniques; knowledge and familiarity with the physical requirements associated with policing; knowledge and familiarity with radio procedures during stressful event in policing; knowledge of and familiarity with case law related to use of force in policing; knowledge and familiarity with verbal communications with resistive subject pertaining to policing; certified to carry lethal and non-lethal weapons in policing.

Updated training for patrol officers on safety, tactics, searches, exterior and interior tactics.
246 RIFLE MARKSMANSHIP AND SNIPER
0.5 unit, 50 lab hours, (1 week),
(Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires an extensive knowledge and familiarity with use of for situations during extreme high risk situations in law enforcement sniper required situations. Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge and familiarity with California Penal codes used in law enforcement pertaining to use of force; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.
Patrol and SWAT officer rile advanced course, ballistics, zeroing, ammunition, responsibilities, maintenance, moving targets, use of force decision making and shooting drills.

246A SEARCH/ARREST WARRANT
0.1 unit, 0.47 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of Vehicle codes pertaining to policing; knowledge of persons under the influence of drugs or alcohol related to vehicle collision investigations; knowledge of, and familiarity with, officer safety during Field Sobriety Testing in the field during policing; knowledge of, and familiarity with, courtroom testimony related to policing; knowledge of, and familiarity with, evidence collection pertaining to policing; Knowledge of, and familiarity with, police report writing; knowledge of, and familiarity with, crime scene photography; knowledge of, and familiarity with, vehicle identification numbers located on several location of vehicles; certified for NCIC use.
Warrant deployment, search warrant process, warrant planning, interior tactics, application, and scenarios.

246B TRAFFIC COLLISION INVESTIGATION UPDATE
0.3 unit, 0.93 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.
Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of Vehicle codes pertaining to policing; knowledge of persons under the influence of drugs or alcohol related to vehicle collision investigations; knowledge of, and familiarity with, officer safety during Field Sobriety Testing in the field during policing; knowledge of, and familiarity with, courtroom testimony related to policing; knowledge of, and familiarity with, evidence collection pertaining to policing; Knowledge of, and familiarity with, police report writing.
Update to basic traffic collision investigation course, CIM manual, diagramming, data retrieval system, and field exercise.
246C USE OF FORCE UPDATE 0.3 unit, 0.93 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of blood borne pathogens as they pertain to law enforcement services; Certified to carry and deploy a law enforcement TASER; ability to perform CPR and First Aid techniques; knowledge of, and experience with, law enforcement suspect containment during criminal in-progress crimes; knowledge of, and familiarity with, proper and safe tactical movement pertaining to policing; knowledge of, and experience with, law enforcement mindset during policing operations; Knowledge of, and experience with, proper police driving techniques. Update law enforcement officers in electronic weapons, O.C., less lethal shotgun, legal update, baton and force options.

246D PERISHABLE SKILLS PROGRAM I 0.3 unit, 0.93 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean, Academy Director, or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires an extensive knowledge and familiarity with use of for situations during extreme high risk situations in law enforcement sniper required situations. Possession of a valid California Driver's License; Certified to carry a law enforcement tactical rifle under Penal Code section 33220(b). Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge and familiarity with California Penal codes used in law enforcement pertaining to use of force; knowledge of, and experience driving a law enforcement emergency vehicle; knowledge of how perception and reaction time affects a vehicle's total stopping distance; knowledge and familiarity with the importance and proper use of safety belts and tactical removal of safety belts; knowledge of effective verbal communication used in law enforcement; knowledge of effective non-verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Advanced officer update covering, driving skills, CPR & First Aid, blood borne pathogens, tactical communication, body cameras, case law, marksmanship, handgun, shotgun, and arrest & control.

246E PERISHABLE SKILLS PROGRAM II 0.1 unit, 0.47 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of, and familiarity regarding officer safety related to police baton use; knowledge of proper and safe tactical movement related to police crowd control; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under physical situations; knowledge of proper and safe arrest and control techniques related to domestic violence incidents; knowledge of, and familiarity with, California Penal codes used in law enforcement use of force pertaining to crowd control and domestic violence; knowledge of effective verbal and non-verbal communication used in law enforcement during citizen contacts; knowledge of, and familiarity with, case law pertinent to law enforcement related to domestic violence; ability to perform CPR and First Aid techniques; knowledge of proper documentation in police reports pertaining to crowd control and domestic violence; knowledge of and familiarity with community policing and problem solving.

Advanced officer update covering, domestic violence, crowd control, tactical communication and racial profiling.
Course requires extensive knowledge of all types of law enforcement incidents, crime scenes and emergency environments that police canines are deployed. Students must be experienced in the behaviors of police canine during in the field deployments. A student relies on patrol experiences with knowledge and familiarity with the Penal code, Vehicle code, Health & Safety code, knowledge and familiarity with case law pertaining to canine policing; knowledge and familiarity with collection of evidence; knowledge and familiarity with criminal suspect's rights; be in good physical condition to move quickly, have agilely and strength to endure canine strikes; certified for CPR and First Aid.

K9 handler skills update for currently certified canine handler working in law enforcement.

246H MACTAC – MULTI ASSAULT, COUNTER TERRORISM ACTION CAPABILITIES
0.1 unit, 0.47 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Multi-assault, counter terrorism capabilities overview related to the response to terrorism in the United States for local law enforcement.

246I BASIC BICYCLE PATROL
1.5 units, 1.87 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.

Familiarizes the sworn law enforcement bike officer patrol riding techniques, use of force concerns, legal procedures, equipment and maintenance.
246J DRUG/ALCOHOL STANDARDIZED FIELD SOBRIETY TESTS UPDATE
0.1 unit, 0.46 lab hour, (Pass/No Pass), 
(Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
Provide students with the ability to refresh their knowledge at recognizing and interpreting evidence of DUI violations, administer and interpret standardized field sobriety tests, describe DUI evidence, give verbal testimony and document the incident.

246K CRISIS INTERVENTION TRAINING
0.5 unit, 2.23 lab hours, (Pass/No Pass), 
(Open Entry/Open Exit)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency. Course meets the minimum topics of SB29 & PC 13515.28(a)(1)
Provides students with increased knowledge about mental health crisis, mental illness, the stigma associated with mental illness, and de-escalation strategies to avoid violent confrontations. Course meets the minimum topics of SB29 & PC 13515.28(a)(1)

262 SB 29 MENTAL HEALTH AWARENESS FOR FTOS
0.1 unit, 0.47 lab hour, (Pass/No Pass), 
(Open Entry/Open Exit)
ADVISORY: Administration of Justice 270B. A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are related to adopted POST or industry standards. Students must have legal authority to possess law enforcement weapons/equipment involved in the course. Students must have completed any related basic certification before attending update courses. NOTE: Approval of equivalent training is not a guarantee that state regulatory or licensing agencies will also grant equivalency.
8-hour mental health awareness information required for newly assisted Field Training Officers (FTOs) to conform with California Senate Bill 29.

268 PRE-POLICE ACADEMY COURSE
1 unit, 4.2 lecture hour, (6 weeks), 
(Pass/No Pass)
ADVISORY: In good physical condition to perform physical training.
Expose future FCC Police Academy students to a POST Basic Police Academy structure and environment. Discipline, structure, physical demands, studying, safety, uniform maintenance, Learning Domain books will be introduced.

269A ADVANCED OFFICER TOPICS #2
0.2-4 units, 0.1-2.33 lecture hours, 
0.1-2.33 lab hours, (1-18 weeks), 
(Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B or equivalent, or currently employed by a Public Safety Agency.
Satisfies mandatory yearly requirements of the California Commission on Peace Officer Standards and Training (POST) or Standards for Training in Corrections (STC) for advanced officer training. May be offered in seminar, lecture, and/or laboratory format. Examination of topics, current trends, and/or issues as mandated by POST or STC and not covered by regular catalog offerings. Course content to be determined by POST or STC. The format of delivery will vary. No class will be presented in less than four hours of subject matter, or more than 84 hours of subject matter. These courses may be presented within one week or 18 weeks with variables between those two time limits. The variable format is provided due to public safety officers’ demanding schedules and the officer’s limited flexing times available to train.

270A BASIC POLICE ACADEMY – PART 1
17.5 units, 12.3 lecture hours, 
10.75 lab hours, (20 weeks)
PREREQUISITE: Successful completion of post: (1) POST Standardized Reading Comprehension and Writing Skills Test; (2) POST Physical Agility Test; and (3) Physical Exam. Possess a valid Class C California Driver’s License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC13511.5), or be sponsored by a law enforcement agency.
Satisfies the requirement of the California Commission of Peace Officer Standards and Training (POST) for Basic Police Academy training mandatory for every full-time peace officer under Penal Code Section 830.1. Must be taken in tandem without a time separation between courses (Administration of Justice 270A and Administration of Justice 270B). Materials, range, driving, health, and parking fees will be charged.
270B BASIC POLICE ACADEMY – PART 2
20.5 units, 11.2 lecture hours, 12.93 lab hours, (24 weeks)
PREREQUISITE: Successful completion of Administration of Justice 270A when taken in tandem without a time separation between courses (Administration of Justice 270A and Administration of Justice 270B).

(1) POST Standardized Reading Comprehension and Writing Skills Test; (2) POST Physical Agility Test; and (3) Physical Exam. Possess a valid Class C California Driver’s License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC13511.5), or be sponsored by a law enforcement agency.
Satisfies the requirement of the California Commission of Peace Officer Standards and Training (POST) for Basic Police Academy training mandatory for every full-time peace officer under Penal Code, Section 830.1. Health, parking and range fees will be charged.

271A PC 832 LAWS OF ARREST/ARREST & CONTROL
1.5 units, 31.5 lecture hours, 10.5 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: Demonstration of physical ability to perform arrest and control techniques in a safe manner.
Basics in arrest and control techniques and knowledge of California laws related to the requirements of Section 832 (Level III) of the California Penal Code.

271B PC 832 FIREARMS
0.5 unit, 4.2 lecture hours, 21 lab hours, (1 week), (Pass/No Pass)
PREREQUISITE: Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course.
Basic use of firearms to fulfill the requirements of Section 832 of the California Penal Code. Materials and range fee will be charged.

272 REGULAR BASIC COURSE – MODULAR FORMAT – MODULE III
10 units, 9 lecture hours, 3.4 lab hours
PREREQUISITE: Valid Class C California Driver’s License. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5) or be sponsored by a law enforcement agency.
Satisfies mandatory training requirements for Level III Reserve Peace Officer and is the mandatory prerequisite for the Administration of Justice 273 (Level II module). Must provide a handgun, ammo, and safety equipment associated with a firearms course.

273 REGULAR BASIC COURSE – MODULAR FORMAT – MODULE II
13 units, 11.1 lecture hours, 6.1 lab hours
PREREQUISITE: Successful completion of Administration of Justice 272 (Module III). Current (within the last 3 years) in PC 832, Arrest and Firearms, training requirements. Proof of a Department of Justice criminal history clearance to possess a firearm (PC 13511.5). Passage of the POST – Constructed Comprehensive Module II End of Course Proficiency Test within the preceding 12 months.
Satisfies mandatory requirements for Level II Reserve Peace Officer and is the mandatory prerequisite for Administration of Justice 274 (Level I module).

274 REGULAR BASIC COURSE – MODULAR FORMAT – MODULE I
25.5 units, 18 lecture hours, 8.7 lab hours, (22 weeks)
PREREQUISITE: Successful completion of Administration of Justice 272 and 273. Current (within last 3 years) in PC 832, Arrest and Firearms, training requirements. Passage of the POST Constructed Comprehensive Module II End of Course Proficiency Test within the preceding 12 months. Successful completion of the POST Standardized Reading Comprehension and Writing Skills Test and the POST Physical Agility Test. Proof of Department of Justice criminal history clearance to possess a firearm (PC 13511.5) Physical exam, including an electrocardiogram (EKG) printout. Or, be sponsored by a law enforcement agency. Valid Class C California Driver’s License.
Satisfies training requirements mandatory for every full-time peace officer under Penal Code section 30.6(a)(1) and 832.6(a)(1). Completion of all three modules satisfies the Regular Basic Course training requirement.

276 POST BASIC SUPERVISOR
4.5 units, 42 lecture hours, (2 weeks), (Pass/No Pass), (Formerly Administration of Justice 73 and 76)
PREREQUISITE: POST training curriculum for the newly promoted law enforcement supervisor. Role identification, leadership styles, values, ethics, and principles, assertive leadership, etc. Materials fee will be charged.
POST training curriculum for the newly promoted law enforcement supervisor. Role identification, leadership styles, values, ethics and principles, assertive leadership, etc. Materials fee will be charged.
276A  STC BASIC SUPERVISOR COURSE
4.5 units, 42 lecture hours, (2 weeks),
(Pass/No Pass)
PREREQUISITE: A Standards and Training for Corrections (STC)
Probation Officer CORE Course, Adult Correctional Officer CORE Course,
or Juvenile Correctional Officer CORE course certificate issued from an
accredited training provider for STC or equivalent as determined by the
Division Dean or their appointee. These skills and knowledge base are
related to adopted STC and/or industry standards. NOTE: approval of
equivalent training is not a guarantee that state regulatory or licensing
agencies will also grant equivalency.

This course meets the 80-hour requirement of Minimum Jail
Standards Title 15, Section 181 for supervising adult corrections officer,
supervising probation officer, or supervising juvenile corrections officer.
Topics include role identification, leadership styles, investigations, role
transition, assertive leadership, training, employee relations, adminis­
trative support, stress, performance appraisal, communications, media
relations, counseling, planning and organization, discipline, report
review, values/ethics and principles, and liability issues. Material fees
are charged for this course.

278  PUBLIC SAFETY DISPATCHER
7 units, 8.4 lecture hours, (15 weeks),
(Pass/No Pass), (Formerly Administration
of Justice 89 and 78)
PREREQUISITE: A Standards and Training for Corrections (STC)
Probation Officer CORE Course, Adult Correctional Officer CORE Course,
or Juvenile Correctional Officer CORE course certificate issued from an
accredited training provider for STC or equivalent as determined by the
Division Dean or their appointee. These skills and knowledge base are
related to adopted STC and/or industry standards. NOTE: approval of
equivalent training is not a guarantee that state regulatory or licensing
agencies will also grant equivalency.

This course meets the 80-hour requirement of Minimum Jail
Standards Title 15, Section 181 for supervising adult corrections officer,
supervising probation officer, or supervising juvenile corrections officer.
Topics include role identification, leadership styles, investigations, role
transition, assertive leadership, training, employee relations, adminis­
trative support, stress, performance appraisal, communications, media
relations, counseling, planning and organization, discipline, report
review, values/ethics and principles, and liability issues. Material fees
are charged for this course.

279  CITIZENS’ POLICE ACADEMY
0.5 unit, 3.15 lab hours, (17 weeks),
(Pass/No Pass), (Formerly Administration
of Justice 79)
PREREQUISITE: None.
To educate and inform citizens regarding the function and duties
of law enforcement personnel. Materials fee will be charged.

280  ADULT CORRECTIONAL OFFICER CORE
10 units, 33.6 lecture hours,
8.4 lab hours, (5 weeks), (Pass/No Pass),
(Formerly Administration of Justice
74 and 80)
PREREQUISITE: None.
Satisfies the requirements for Standards and Training for Cor­
rections (STC), basic correctional academy training.

284  COMMUNICATIONS TRAINING OFFICER
2 units, 42 lecture hours, (1 week),
(Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training
Basic Dispatcher Course certificate issued from an accredited regional
police academy or equivalent as determined by the Division Dean,
Director or their representative. NOTE: Approval of equivalent training
is not a guarantee state regulatory or licensing agencies will also grant
equivalency.

Prior to beginning this course students must already be familiar
with, and be able to demonstrate, all of the skills listed below. These
will not be taught in the course; rather, they will be the starting point for
advanced student training that builds upon them. These minimum skill
levels are:

Course requires extensive knowledge of all types of police
dispatch center operations, because as first line training officer you
must have a wide variety communication center operations. Due to
giving citizen callers preliminary instructions via telephone, prior to
police officer arrival, the students will also be required to have detailed
knowledge of California law, case law, evidence collection, and crim­
inal justice procedures. Knowledge of Penal and Vehicle codes used
in policing; knowledge of Health & Safety codes; knowledge of local,
state and federal laws pertaining to policing required in public safety
dispatching; knowledge of proper use of verbal communication used
in law enforcement contacts with the public; Knowledge, and familiarity
with, common communication center dispatching software; Knowledge
of the rank structure in policing; knowledge, and familiarity of, local,
state, and federal laws, and policies, pertaining to law enforcement.

Prepare experienced public safety dispatchers to serve as trainers
for new employees, covers the role and duties of the Communications
Training Officer (CTO), adult learning concepts, mentoring, evaluating,
and documentation of training.

285  PROBATION CORE COURSE
10 units, 35.6 lecture hours, 6.4 lab
hours, (5 weeks), (Pass/No Pass),
(Formerly Administration of Justice 85)
PREREQUISITE: None.
Knowledge and skills essential for newly hired Probation Officers.
Materials fee will be charged.
286  JUVENILE CORRECTIONAL OFFICER CORE
7 units, 27.3 lecture hours, 14.7 lab hours, (4 weeks), (Pass/No Pass), (Formerly Administration of Justice 86)
PREREQUISITE: Employment as a correctional officer.

Knowledge and skills essential for newly hired Juvenile Counselors to meet maximum performance standards and to obtain maximum benefits from subsequent on-the-job training. Meets certification requirements for California Standards and Training for Corrections. Materials fee will be charged.

290  FIREARMS INSTRUCTORS COURSE
1.5 units, 22 lecture hours, 20 lab hours, (1 week), (Pass/No Pass), (Formerly Administration of Justice 90)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the division Dean or their appointee. These skills and knowledge base are listed in Entrance Skill of this course. Must be able to demonstrate physical ability to use a firearm in a safe manner. Must obtain a Department of Justice clearance for firearms possession prior to entering a POST approved course. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Knowledge of proper and safe firearms handling; ability to achieve a qualifying score during hand gun shooting; ability to achieve a qualifying score during shotgun training; ability to achieve a qualifying score during AR 15 shooting; knowledge of proper and safe tactical movement; knowledge of, and familiarity with sustained physical performance demands on law enforcement officers under emergency and stressful situations; knowledge of proper weapons transitioning techniques; knowledge of proper and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes used in law enforcement related to firearms carry laws; knowledge of effective verbal communication used in law enforcement pertaining to use of force warnings; knowledge of, and familiarity with, case law pertinent to law enforcement shootings; ability to perform CPR and First Aid techniques.

Designed to prepare the student with the fundamentals of teaching law enforcement firearms techniques to others and to create and administer a safe and quality Firearms Training Program. Various shooting styles and updated instruction on the most effective contemporary techniques used in law enforcement today. How to diagnose shooting problems through target analysis, and how to properly correct the problems. Materials fee will be charged.

291  FIELD TRAINING OFFICER
2 units, 42 lecture hours, (1 week), (Pass/No Pass), (Formerly Administration of Justice 91)
PREREQUISITE: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean, Director or their representative. NOTE: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar with, and be able to demonstrate, all of the skills listed below. These will not be taught in the course; rather, they will be the starting point for advanced student training that builds upon them. These minimum skill levels are:

Course requires extensive knowledge of all types of police operations, because as first line police training officer you must have a wide variety of law enforcement daily operations. The first line training officer will need to possess deep operational knowledge because in part, he or she will be called upon to make judgments regarding the in-field training of police officers. Students will also be required to have detailed knowledge of California law, case law, evidence collection, and criminal justice procedures. Knowledge of, and familiarity with, proper use of force during law enforcement operations; knowledge, and familiarity with, Penal and Vehicle codes; knowledge, and familiarity with, Health & Safety codes; knowledge of proper use of verbal and non-verbal communication used in law enforcement contacts with the public; knowledge of, and familiarity with, current case law related to proper law enforcement procedures in daily policing; knowledge of the proper use of police weaponry as it pertains to its use in daily policing; Knowledge of the rank structure in policing; knowledge, and familiarity of, local, state, and federal laws, and policies, pertaining to law enforcement.

Training of experienced officers so they can provide field training to new recruits. Evaluation, motivation, and discipline; issues of supervision, value and ethics, adult learning processes, counseling, and role of the training officer. Materials fee will be charged.
291A  FTO UPDATE
1 unit, 25.2 lecture hours, (1 week),
(Pass/No Pass)
PREREQUISITE: A California Peace Officer Standards and Training
Basic Course certificate issued from an accredited regional police acad­
emy or equivalent as determined by the Division Dean, Director or their
representative. NOTE: Approval of equivalent training is not a guarantee
state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students must already be familiar
with, and be able to demonstrate, all of the skills listed below. These
will not be taught in the course; rather, they will be the starting point for
advanced student training that builds upon them. These minimum skill
levels are:

Course requires extensive knowledge of all types of police opera­
tions, because as first line police training officer you must have a wide
variety of law enforcement daily operations. The first line training officer
will need to possess deep operational knowledge because in part, he or
she will be called upon to make judgments regarding the in-field training
of police officers. Students will also be required to have detailed knowl­
dge of California law, case law, evidence collection, and criminal justice
procedures. Knowledge of, and familiarity with, proper use of force during
law enforcement operations; knowledge, and familiarity with, Penal and
Vehicle codes; knowledge, and familiarity with, Health & Safety codes;
knowledge of proper use of verbal and non-verbal communication used
in law enforcement contacts with the public; knowledge of, and familiarity
with, current case law related to proper law enforcement procedures in
daily policing; knowledge of the proper use of police weaponry as it
pertains to its use in daily policing; knowledge of the rank structure in
policing; knowledge, and familiarity with, local, state, and federal laws, and
policies, pertaining to law enforcement.

Reviews the concept and structure of a Field Training Program
in law enforcement, include; Goals of a FTO program, Ethics, Coaching,
Teaching/Training demonstrations, Evaluations, Driver Safety Issues,
Intervention Techniques, Remediation, Documentations and other issues
related to the FTO environment.

Knowledge of Vehicle codes pertaining to policing; knowledge of
persons under the influence of drugs or alcohol related to vehicle collision
investigations; knowledge of, and familiarity with, officer safety during
Field Sobriety Testing in the field during policing; knowledge of, and
familiarity with, courtroom testimony related to policing; knowledge of,
and familiarity with, evidence collection pertaining to policing; Knowledge
of, and familiarity with, police report writing.

Training in proper traffic collision investigations procedures and
proper recording format as prescribed by the Collision Investigation
Manual (HPN 110.5) for state-wide use. Satisfies requirements of Police
Officer Standards and Training (POST) and California Vehicle Code
Section 40600a. Materials fee will be charged.

369A  ADVANCED OFFICER TOPICS
0-1.17 lecture hours, 0-1.17 lab hours,
(Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 270B or equivalent,
and currently employed by a Public Safety Agency.

Satisfies mandatory yearly requirements of the California Com­
mision on Peace Officer Standards and Training (POST) or Standards
for Training in Corrections (STC) for advanced officer training. May be
offered in seminar, lecture, and/or laboratory format. Examination of
topics, current trends, and/or issues as mandated by POST or STC and
not covered by regular catalog offerings. Course content to be determined
by POST or STC. The format of delivery will vary. No class will be pre­
sented in less than four hours of subject matter, or more than 42 hours
of subject matter. These courses may be presented within one week or
18 weeks with variables between those two-time limits. The variable
format is provided due to public safety officers’ demanding schedules
and the officer’s limited and flexing times available to train.

AEROSPACE STUDIES (AEROST)

1A  USAF FOUNDATIONS
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended.
COREQUISITE: Aerospace Studies 3.

The Air Force in the contemporary world. Focuses on basic
organizational structure and missions of Air Force organizations and an
introduction to leadership and followership. Includes a basic study of
Air Force communications and briefing skills. (A, CSU, UC)

1B  USAF FOUNDATIONS
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. COREQUI­
site: Aerospace Studies 3.

The Air Force in the contemporary world. Focuses more on
leadership and followership then on the organizational structure and
missions of Air Force organizations. Officership and professionalism
are stressed; and includes a more in-depth study of Air Force communication
skills. (A, CSU, UC)
2A  EVOLUTION OF AIR AND SPACE POWER
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 3.
Detailed look at strategy, doctrine, and evolution of the art and science of air, space and cyberspace power until 1960; history, political science, and leadership studies; basic communication skills training and evaluation in terms of improving professional writing and speaking. (A, CSU, UC)

2B  EVOLUTION OF AIR AND SPACE POWER
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 3.
Detailed look at strategy, doctrine, and evolution of the art and science of air, space and cyberspace power after 1960; history, political science, and leadership studies; basic communication skills training and evaluation in terms of improving professional writing and speaking. (A, CSU, UC)

3  LEADERSHIP LABORATORY
1 unit, 4 lab hours, (Pass/No Pass)
COREQUISITE: Aerospace Studies 1A, or 1B, or 2A, or 2B. (Note: if a cadet has taken all 4 of the possible corequisite courses, they do no need to enroll in a corequisite course again. They can then take Aerospace 3 as a stand-alone course.)
A practicum of Air Force customs and courtesies, issuing military commands, instructing, directing and evaluating the preceding skills, studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. (A, CSU, UC)

5  DRILL AND CEREMONY FUNDAMENTALS
0.5 unit, 0.5 lecture hour, 0.5 lab hour
ADVISORY: Eligibility for English 1A recommended. COREQUISITE: Aerospace Studies 1A, or 1B, or 2A, or 2B. (Note: if a cadet has taken all 4 of the possible corequisite courses, they do no need to enroll in a corequisite course again. They can then take Aerospace 3 as a stand-alone course.)
The elements of military drill, individual and group precision movements, development of command voice; technical, stylistic and aesthetic aspects of creative drill maneuvers; encompasses both rehearsal and public performance. (A, CSU)

AFRICAN-AMERICAN STUDIES (AFRAM)
FORMERLY CULTURAL STUDIES/BLACK STUDIES

1  INTRODUCTION TO AFRICAN-AMERICAN STUDIES
3 units, 3 lecture hours, (Formerly Cultural Studies 1)
ADVISORY: Eligibility for English 1A recommended.

2  AFRICAN AMERICAN CULTURAL ADAPTATION
3 units, 3 lecture hours, (Formerly Cultural Studies 20)
ADVISORY: Eligibility for English 1A recommended.
Examination and evaluation of the dynamic development of African American culture from the era of enslavement through the election of the first African American President of the United States. (A, CSU, UC)

3  AFRICAN-AMERICAN ART
3 units, 3 lecture hours, (Formerly Cultural Studies 3)
ADVISORY: Eligibility for English 1A recommended.
Introduction and overview of the creative production of African and African American people through different media: painting, architecture, sculpture, drawing, and painting. (A, CSU-GE, UC, I)

4  CLASSICAL AND PRE COLONIAL AFRICA
3 units, 3 lecture hours, (Formerly Cultural Studies 4)
ADVISORY: Eligibility for English 1A recommended.
Classical African society from its earliest origins through the European Colonialization through interdisciplinary study of religion, law, art, science, education, social obligations, and the centrality of the family unit. (A, CSU-GE, UC, I)

5  THE AFRICAN DIASPORA OF THE AMERICAS
3 units, 3 lecture hours, (Formerly Cultural Studies 5)
ADVISORY: Eligibility for English 1A recommended.
A historical overview and contemporary evaluation of the African diaspora of the Colonial Era focusing on North American, South America and the Caribbean. (A, CSU, UC)
6 AFRICAN CULTURES AND LANGUAGES
3 units, 3 lecture hours, (Formerly Cultural Studies 6)
ADVISORY: Eligibility for English 1A recommended.
Introduction and overview of West African linguistic traits, colonial language adaptation and cultural implication of language usage. Includes evaluation of music elements as language and traits that were carried by the African Diaspora to the Americas and Caribbean. (A, CSU, UC)

8 AFRICAN-AMERICAN CREATIVE WORKSHOP
3 units, 2 lecture hours, 3 lab hours, (Formerly Cultural Studies 8)
ADVISORY: Eligibility for English 1A recommended.
A creative multi-discipline workshop based on the history and culture of the African-American. (A, CSU-GE, UC)

15 AFRICAN-AMERICAN MUSIC
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction and overview of the music of African Americans including West African traditions and styles, Antebellum music, the Harlem Renaissance and other post Reconstruction era music, Jazz music and the many derivatives and variations of African American music of the 20th century, though contemporary genres of Rap and Hip Hop. (A, CSU-GE, UC, I)

17 AFRICAN-AMERICAN LITERATURE
3 units, 3 lecture hours, (See also English 17)
PREREQUISITE: English 1A or equivalent.
Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (A, CSU-GE, UC, I)

34 HISTORY OF THE AMERICAN CIVIL RIGHTS MOVEMENT
3 units, 3 lecture hours, (See also History 34)
ADVISORY: English 1A recommended.
History of the struggle for civil and human rights in American history, focusing on the African American movement. Legal, moral, ethical, religious and humanistic foundations of the Movement. Forms of discrimination, segregation and oppression and various forms of resistance to them. Efforts to protect human and civil rights in the United States. (A, CSU-GE, UC, I)

41 AFRICAN-AMERICAN WOMEN’S STUDIES
3 units, 3 lecture hours, (See also Women’s Studies 41), (Formerly Cultural Studies 41)
ADVISORY: Eligibility for English 1A recommended.
Analyzes the social, political, and cultural history of African American women in the United States from an interdisciplinary perspective including the complex ways that ethnicity, class and gender have shaped African American women’s lives and the strategies they have used to empower themselves and their communities. (A, CSU, UC)

AIR CONDITIONING
SEE HEATING, VENTILATION, AND AIR CONDITIONING

ALLIED HEALTH (ALHLTH)

1 INTRODUCTION TO PUBLIC HEALTH
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introduction to the discipline of Public Health. Basic concepts and terminologies of public health and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions and an in-depth examination of the core public health disciplines. Topics include the epidemiology of infectious and chronic disease, prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations, community organizing and health promotion programming, environmental health and safety, global health, and health care policy and management. (C-ID PHS 102) (A, CSU, UC)

2 HEALTH AND SOCIAL JUSTICE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, racism and gender shape health epidemics and policy development. The basic skills necessary for advocating for health and social justice will be theoretically demonstrated. (A, CSU, UC)
19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units, 3.33-33.3 lab hours
COREQUISITE: Allied Health 204. Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student’s major. Offered under specific majors. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to the student’s major. Collaborative learning objectives established specific to the particular occupational field. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

20 IMPROVING CULTURAL COMPETENCE THROUGH CROSS-CULTURAL EXPERIENCE
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Identifying cultural and spiritual differences and developing strategies to overcome potential conflicts. Intended for study abroad. (A, CSU)

21 CULTURALLY RELEVANT HEALTH PROMOTION EXPERIENCE
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Short term field study abroad course to research and identify basic health promotion activities relevant to the country and local ethnic groups. (A, CSU)

100 INTRODUCTION TO HEALTH CAREERS
2 units, 2 lecture hours
PREREQUISITE: None.
A prerequisite course for allied health programs to establish a solid foundation in the understanding of allied health professions and the multidisciplinary environment. (A)

104 AUTISM TECHNICIAN TRAINING
3 units, 3 lecture hours
PREREQUISITE: None.
Prepares students for entry-level positions in the field of behavioral health treatment for individuals with autism spectrum disorders (ASD). Students who successfully complete the course will have the training and experience required to be eligible to take the exam to become a Registered Behavior Technician (RBT). Provides students with foundational knowledge in autism spectrum disorders (ASD), applied behavior analysis, and evidence-based intervention techniques. (A)

AMERICAN INDIAN STUDIES (AMIND) FORMERLY NATIVE AMERICAN STUDIES

20 NATIVE PEOPLES OF CALIFORNIA
3 units, 3 lecture hours, (Formerly Anthropology 20)
ADVISORY: Eligibility for English 1A recommended.
The ethnohistory, linguistics, spiritual beliefs, political organization, subsistence patterns, gender, arts, oral history, social issues, images and cultures of the indigenous peoples of California. Conflict with various colonial forces and contemporary issues. (A, CSU-GE, UC)

31 AMERICAN INDIAN CULTURE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The Native Nations of North America (American Indians) from antiquity to the present; regional survival strategies and expressive arts; effects of invasion and colonization with an emphasis on self-preservation and continuing sovereignty. (A, CSU-GE, UC, I)

32 AMERICAN INDIAN HISTORY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The history of the American Indian nations from antiquity to the mid-20th century, with an emphasis on pre-Columbian life, the European invading nations, and federal-Indian relations in the United States. (A, CSU, UC)

34 THE AMERICAN INDIAN IN CONTEMPORARY SOCIETY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
American Indian in North America after the Second World War to the present; emphasis on current events and legislation; issues involving the inherent sovereignty of American Indian nations and their place in modern global society. (A, CSU-GE, UC, I)

35 AMERICAN INDIAN ART
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Major American Indian art traditions of North America. Pre-contact and early-contact-era traditions and the evolution of Indian art forms in contemporary times. Design and techniques in Indian art. Emphasis on North, Central and South America. (A, CSU-GE, UC, I)
AMERICAN SIGN LANGUAGE
SEE FOREIGN LANGUAGES

AMERICAN STUDIES (AMST)

10 AMERICAN PLURALISM: A SEARCH FOR COMMON GROUND IN A MULTICULTURAL SOCIETY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Multidisciplinary examination of racial and ethnic identity in a multicultural society, the roots of prejudice and of religious and ethnic animosities, with special emphasis on what forces unite as well as divide this country. (C-ID SJS 110) (A, CSU-GE, UC, I)

11 LAW AND DEMOCRACY
3 units, 3 lecture hours
PREREQUISITE: English 1A.
Evaluation, debate, and critical analysis of law and legal issues that affect individuals, their families, and communities. Practical and historical aspects of civil, criminal, constitutional, immigration, and consumer law in a diverse society, with an orientation toward civic involvement in the local community. Includes an interdisciplinary exploration of themes such as equality, citizenship, access, and social justice. (C-ID SJS 110) (C-ID SJS 110) (A, CSU-GE, UC, I)

ANTHROPOLOGY (ANTHRO)

1 BIOLOGICAL ANTHROPOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Concepts, methods of inquiry, and scientific explanations for biological evolution and application to the human species. Topics include: genetics, evolutionary theory, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. Scientific method serves as foundation of the course. (C-ID ANTH 110) (A, CSU-GE, UC, I)

1L BIOLOGICAL ANTHROPOLOGY LABORATORY
1 unit, 3.5 lab hours
COREQUISITE: Anthropology 1. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
A hands-on laboratory experience to supplement Biological Anthropology. May be taken either concurrently with Anthropology 1 or in a subsequent term. Exercises will provide additional experience and hands-on activities to expand student learning in the following major subject areas: the scientific method, evolution and natural selection with a specific focus on human evolution, evolutionary genetics, modern human variation, forensic anthropology, primate anatomy and behavior, and the hominid fossil record. (A, CSU-GE, UC, I)

2 CULTURAL ANTHROPOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Explores how anthropologists study human culture. The broad arc of human experiences: subsistence, social, political, and economic organization, communication and creative expression, family and kinship, belief systems. Includes discussion of gender, racial and ethnic identity labels, and the effects of colonialism and globalization. Ethnographic case studies; professional anthropological research ethics; the application of anthropology to understanding humans around the globe. (C-ID ANTH 120) (A, CSU-GE, UC, I)

2H HONORS CULTURAL ANTHROPOLOGY
3 units, 3 lecture hours, (Formerly Honors 2A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Explores how anthropologists study human culture. The broad arc of human experiences: subsistence, social, political, and economic organization, communication and creative expression, family and kinship, belief systems. Includes discussion of gender, racial and ethnic identity labels, and the effects of colonialism and globalization. Ethnographic case studies; professional anthropological research ethics; the application of anthropology to understanding humans around the globe. Honors takes a greater cross-disciplinary perspective, places greater emphasis on the use of anthropology on the understanding of the modern world, and more critically evaluates the methods and theory of anthropology. (C-ID ANTH 120) (A, CSU-GE, UC, I)

3 ARCHAEOLOGY AND WORLD PREHISTORY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
A broad survey of physical and cultural evolution of the human species from the earliest signs of “humanness” through the rise of civilization as understood through the archaeological record. Includes a brief introduction to the methods of archaeology and the interdisciplinary nature of archaeological research. (A, CSU-GE, UC, I)
4 INTRODUCTION TO ARCHAEOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Introduction to the study of concepts, theories, data and models of anthropological archaeology that contribute to knowledge of the human past. Includes discussion of the nature of scientific inquiry, the history and interdisciplinary nature of archaeological research; dating techniques, methods of survey, excavation, analysis, and interpretation incorporating selected cultural sequences; cultural resource management; professional ethics. (C-ID ANTH 150) (A, CSU-GE, UC, I)

16A FIELD ARCHAEOLOGY I
2 units, 1 lecture hours, 3 lab hours,
(Formerly Anthropology 6)
COREQUISITE: Anthropology 4. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 and 250 recommended.
Field experience in archaeology. Development of practical skills including archaeological survey, excavation, mapping, and site recordation; artifact, feature, site, and cultural landscape identification in field situations; and logistics of archaeological projects. Required orientation meeting prior to field experience. (A, CSU, UC)

16B FIELD ARCHAEOLOGY II
2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Anthropology 4 and 16A. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 and 250 recommended.
A second experience in archaeological field work. Continues development of practical skills in archaeological field work with the addition of higher level responsibilities. (A, CSU, UC)

24 DOING ARCHAEOLOGY: HANDS-ON!
1.5 units, 1 lecture hour, 2 lab hours
COREQUISITE: Anthropology 4. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 and 250 recommended.
Hands-on experience in archaeology: artifact identification; compass use; survey methods; unit, site, and feature mapping; setting up archaeological excavation units; introduction to topographic maps and their use in archaeology especially the use of the Universal Transverse Mercator and Public Lands Survey grid systems. Introduction to site record forms. (A, CSU, UC)

28 ANCIENT MEXICO
3 units, 3 lecture hours, (See also Chicano-Latino Studies 28)
ADVISORY: Eligibility for English 1A.
A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)

30 TOPICS IN ANTHROPOLOGY
1-4 units, 1-3 lecture hours, 0-9 lab hours
ADVISORY: Eligibility for English 1A.
Examination of topics, current trends, and/or issues in the subdisciplines of anthropology not covered by regular catalog offerings. Course content and unit credit to be determined by faculty. May be offered in seminar, lecture, and/or laboratory format. Recommended preparation varies with topic. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)
APPLIED TECHNOLOGY (AT)

10  TECHNICAL COMPUTER APPLICATIONS
    3 units, 3 lecture hours, 1 lab hour,
    (Formerly Industrial Education 23)
    ADVISORY: Eligibility for English 1A recommended.
    An introduction to computers, elements of computer hardware
    and software and how they are used in the workplace, and the social
    impact of computers. Hands-on introduction and development of gen­
    eral computer skills for technical programs such as word processing,
    spreadsheet, presentation applications, and email. Fulfills the computer
    literacy graduation requirement. (A, CSU, UC)

11  BASIC ELECTRICITY
    3 units, 3 lecture hours, (Formerly Industrial
    Education 11)
    ADVISORY: Eligibility for English 1A recommended.
    Fundamental concepts of electricity and its applications. Lecture/
    demonstration. (A, CSU)

19  WORK EXPERIENCE (COOPERATIVE),
    OCCUPATIONAL
    1-8 units
    COREQUISITE: Fall and Spring Semesters: Must be enrolled in
    at least one other course, in addition to occupational work experience.
    Summer Session: Enrollment in another college course is optional. Su­
    pervised employment directly related to the student's major. Offered under
    specific majors. ADVISORY: Eligibility for English 1A recommended.
    Supervised employment extending the classroom based on oc­
    cupational learning related to Applied Technology Division departments.
    Collaborative learning objectives established specific to the particular
    occupational field. Seventy-five (75) hours of paid work or 60 hours of
    non-paid work per unit per semester. Maximum of 8 units per semester.
    Maximum 16 units total. Orientation hours may be required. (A, CSU)

21  OCCUPATIONAL SAFETY AND HEALTH
    2 units, 2 lecture hours, 0.5 lab hours,
    (Formerly Industrial Education 36)
    ADVISORY: Eligibility for English 1A recommended. Applied
    Technology 10 recommended.
    Employer and employee responsibility, federal and state legisla­
    tion, accident reports, industrial hygiene, personal protective equipment,
    materials handling and storage, hazard communication, guarding
    machines and mechanisms, hand and portable power tools, electrical
    safety, and fire protection. (A, CSU)

40  PREPARING FOR EMPLOYMENT
    OPPORTUNITIES
    3 units, 3 lecture hours, (Formerly Industrial
    Education 37)
    ADVISORY: Eligibility for English 1A recommended. Applied
    Technology 10 recommended.
    Development of human relations competencies and professional
    workplace communications including written, oral and presentation skills
    in the work world. Development of job-seeking skills including preparing
    resumes, preparing portfolios and honing job search and interview skills.
    (A, CSU)

120  INDUSTRIAL SCIENCE
    3 units, 3 lecture hours, 1 lab hour,
    (Formerly Industrial Education 51)
    ADVISORY: Eligibility for English 125 and 126 and Mathematics
    201 or Applied Technology 130 recommended.
    A study of Force, Work, Rate, Resistance, Energy, and Power
    in the physical systems of Mechanical, Fluid, Electrical, and Thermal.
    Applications to the trades emphasized. (A)

130  INDUSTRIAL MATHEMATICS
    3 units, 3 lecture hours, (Formerly Industrial
    Education 60)
    PREREQUISITE: Mathematics 260C or 250 or designated math
    score. ADVISORY: Eligibility for English 125 and 126 recommended.
    Trade-related math problems including the use of signed num­
    bers, fractions, ratios and proportions, percentages, algebraic expres­
    sions, exponents, polynomials, factoring, algebraic fractions, radical
    expressions and measuring tools with particular emphasis to the trades.

131  TECHNICAL REPORT WRITING
    3 units, 3 lecture hours, (Formerly Drafting
    43 and Applied Technology 31)
    Learn about the different types of written job-related reports. An
    emphasis is placed on job-related records, forms, and letters. (A)

140  INTRODUCTION TO MACHINE SHOP
    3 units, 2 lecture hours, 3 lab hours
    ADVISORY: Applied Technology 10 recommended.
    Introduction to machine shop equipment in regards to safety,
    operation and application. (A)
150  PNEUMATIC & HYDRAULIC SYSTEMS  
3 units, 2 lecture hours, 3 lab hours  
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Applied Technology 10 recommended.  
Principles and practices of hydraulics/pneumatics as used in the industry. Study of the different applications and management of hydraulics for the most efficient use. Basic pneumatic principles and application systems. (A)

160  MECHANICAL POWER DRIVE SYSTEMS  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 130 recommended.  
The theory behind and practical principles of using mechanical power to do work and includes power sources, drive trains, gearboxes, conveyor systems, and specialized transmission devices. Emphasis will be placed on troubleshooting and repair techniques, safety and reliability. (A)

340  INTRODUCTION TO MACHINE SHOP  
2 lecture hours, 3 lab hours, (Pass/No Pass)  
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 10 recommended.  
Introduction to machine shop equipment in regards to safety, operation and application.

350  PNEUMATIC & HYDRAULIC SYSTEMS  
2 lecture hours, 3 lab hours, (Pass/No Pass)  
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Applied Technology 10 recommended.  
Principles and practices of hydraulics/pneumatics as used in the industry. Study of the different applications and management of hydraulics for the most efficient use. Basic pneumatic principles and application systems.

360  MECHANICAL POWER DRIVE SYSTEMS  
3 lecture hours, 1 lab hour, (Pass/No Pass)  
ADVISORY: Eligibility for English 125 and 126 recommended. Applied Technology 130 recommended.  
The theory behind and practical principles of using mechanical power to do work and includes power sources, drive trains, gearboxes, conveyor systems, and specialized transmission devices. Emphasis will be placed on troubleshooting and repair techniques, safety and reliability.

ARCHITECTURE (ARCH)

10  ARCHITECTURAL DESIGN AND VISUALIZATION I  
3 units, 2 lecture hours, 4 lab hours  
ADVISORY: Architecture 14.  
Basic principles and concepts of design while concurrently addressing the skills of freehand drawing, manual drafting and visualization. History and development of perspective during the Renaissance. (A, CSU, UC)

11  INTRODUCTION TO ARCHITECTURE AND ENVIRONMENTAL DESIGN  
2 units, 2 lecture hours  
ADVISORY: Eligibility for English 1A recommended.  
Familiarization with the professional fields of architecture, landscape architecture, structural engineering, city planning and construction. Roles of the architect and the project team. Introduction to design principles and elements. Phases of the construction project. Licensing requirements. Visiting Lecturers. (A, CSU, UC)

12  ARCHITECTURAL PRACTICE I  
3 units, 2 lecture hours, 3 lab hours  
ADVISORY: Eligibility for English 1A recommended.  
Methods of construction and drafting practices as applied to architectural contract documents concerning plans and details for light wood frame structures. Use and application of building codes and reference material. Site contours and grading. Field trips may be required. (A, CSU)

14  DIGITAL TOOLS FOR ARCHITECTS  
2 units, 1 lecture hour, 3 lab hours  
ADVISORY: Eligibility for English 1A recommended.  
Digital tools in the context of architectural practice. Basic 3D modeling and image manipulation. Presentation layout and output. (A, CSU)

15A  HISTORY OF ARCHITECTURE I  
3 units, 3 lecture hours  
ADVISORY: Eligibility for English 1A recommended.  
History of architecture from prehistory to the Middle Ages including Europe, Asia, Africa, and Pre-Columbian America. Relationship between social, cultural, religious, and physical conditions that influenced the built environment. (A, CSU-GE, UC, I)
15B  HISTORY OF ARCHITECTURE II  
3 units, 3 lecture hours  
ADVISORY: Eligibility for English 1A recommended. 
History of architecture from the Renaissance to the 21st century. Relationship between social, cultural, religious, and physical conditions that influenced the built environment. (A, CSU-GE, UC, I)

20  ARCHITECTURAL DESIGN AND VISUALIZATION II  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: Architecture 10 and 14.  
Continuation of Architecture 10. Extended development of the content of Architecture 10 plus the introduction of color theory. Principles and means for the creation of two dimensional and three dimensional organizations. (A, CSU)

21  MATERIALS OF CONSTRUCTION  
3 units, 3 lecture hours  
ADVISORY: Eligibility for English 1A recommended.  
Materials used in the construction of buildings; their applications and limitations. Construction systems and processes. Field trips may be required. (A, CSU, UC)

22  ARCHITECTURAL PRACTICE II  
3 units, 2 lecture hours, 3 lab hours  

24  BUILDING INFORMATION MODELING  
3 units, 2 lecture hours, 3 lab hours  
ADVISORY: Eligibility for English 1A recommended.  
Building Information Modeling (BIM) in the context of architectural practice. Generation of architectural plans within a BIM environment to include dimensions, details, basic materials and rendering. (A, CSU)

30  ARCHITECTURAL DESIGN AND VISUALIZATION III  
3 units, 2 lecture hours, 4 lab hours  
Continuation of Architecture 20. Extended development of the content of Architecture 20 plus the introduction of site and climate. Analysis and organizational concepts. Light and function as issues in architecture. (A, CSU, UC)

31  BUILDING CODES  
3 units, 3 lecture hours, (Formerly Architecture 24)  
ADVISORY: Eligibility for English 1A recommended.  
International building codes and local building zoning ordinances. (A, CSU)

32  STATICS AND STRENGTH OF MATERIALS  
3 units, 3 lecture hours, (Formerly Architecture 31)  
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic Algebra is recommended.  
Static force systems, trusses, shear, moment, and deflection. Physical properties of materials, shear and moment diagrams, and sizing of structural members. (A, CSU)

34  DIGITAL RENDERING  
3 units, 2 lecture hours, 3 lab hours  
ADVISORY: Eligibility for English 1A recommended.  
Generation of architectural renderings to include lighting, reflection, environment and beginning animation. (A, CSU)

40  ARCHITECTURAL DESIGN AND VISUALIZATION IV  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: Architecture 30.  
Continuation of Architecture 30. Extended development of the content of Architecture 30 with emphasis on the design process. Projects of an architectonic nature will be completed. Development of an educational portfolio. (A, CSU)

41A  OFFICE PRACTICES  
3 units, 3 lecture hours  
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.  
Contracts, specifications, scheduling, estimating and bid practices and procedures as they relate to architectural practice. (A, CSU)

42  TIMBER AND STEEL STRUCTURES  
3 units, 3 lecture hours, (Formerly Architecture 32)  
PREREQUISITE: Architecture 32.  
Calculation and design of timber and steel structures. Engineering of connections. Completion of structural framing plans. (A, CSU)
ART (ART)

2  ART APPRECIATION  
3 units, 3 lecture hours, (Formerly Art 10) 
ADVISORY: English 1A.  
Introduction to the visual arts and human creativity across history and diverse global cultures. Topics include the media of art, techniques, design principles, subject matter, style and theories of art within historical context. (C-ID ARTH 100) (A, CSU-GE, UC, I)

3  TWO-DIMENSIONAL DESIGN  
3 units, 2 lecture hours, 4 lab hours  
ADVISORY: Eligibility for English 1A recommended.  
Introduction to the elements and principles of two-dimensional design which are common to the visual arts. A foundation course stressing visual perception and an effective knowledge of the graphic means of expression and communication. Required for art majors. (C-ID ARTS 100) (A, CSU-GE, UC)

4  THREE-DIMENSIONAL DESIGN  
3 units, 2 lecture hours, 4 lab hours  
ADVISORY: Eligibility for English 1A recommended.  
Exploration and experimentation with the formal elements and principles of visual language in three dimensional design. Required for art majors. Introduces design elements and principles as they apply to 3-dimensional space and form; theory and practice. Includes projects in various media such as: plaster, paper, wood, clay, metal, cement and the use of digital technology. (C-ID ARTS 101) (A, CSU, UC)

5  ART HISTORY ANCIENT TO MEDIEVAL  
3 units, 3 lecture hours, (Formerly Art 25)  
ADVISORY: Eligibility for English 1A recommended.  
A survey of the Western Art from prehistory to the Medieval period including Neolithic, ancient Near East, Egyptian, Greek, Roman, Islamic, Byzantine, Romanesque and Gothic cultures. (C-ID ARTH 110) (A, CSU-GE, UC, I)

5H  HONORS ART HISTORY ANCIENT TO MEDIEVAL  
3 units, 3 lecture hours,  
(Formerly Honors 5A)  
ADVISORY: English 1AH. Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.  
A survey of the Western Art from prehistory to the Medieval period including Neolithic, ancient Near East, Egyptian, Greek, Roman, Islamic, Byzantine, Romanesque and Gothic cultures. Honors section will include additional readings of primary and secondary source material along with oral presentations and class discussions. (C-ID ARTH 110) (A, CSU-GE, UC, I)

6  ART HISTORY RENAISSANCE TO MODERN  
3 units, 3 lecture hours, (Formerly Art 26)  
ADVISORY: English 1A.  
Introductory survey of Western Art from the Renaissance to the modern era. Covers major art styles in Europe and the United States including: Renaissance, Baroque, Neo-classicism, Realism, Impressionism, Cubism, Surrealism and other 20th century avant-garde movements. (C-ID ARTH 120) (A, CSU-GE, UC)

6H  HONORS ART HISTORY RENAISSANCE TO MODERN  
3 units, 3 lecture hours, (Formerly Honors 6A)  
ADVISORY: English 1AH. Meet the qualifications for consideration for acceptance into the Leon S. Peters Honors Program recommended. See Honors Program listing in the college catalog.  
A survey of Western Art from the Renaissance to the present. Major art styles and movements covered include Renaissance, Baroque, Neo-Classicism, Impressionism, Cubism, Surrealism, etc. Honors sections will include additional readings of primary and secondary source material, class discussions and oral presentations. (C-ID ARTH 120) (A, CSU-GE, UC, I)

7  BEGINNING DRAWING  
3 units, 2 lecture hours, 4 lab hours,  
(Formerly Art 7A)  
ADVISORY: Eligibility for English 1A recommended.  
Introduction to the creation of visual images through drawing.  
Introduction to principles, elements, and practices of drawing, employing a range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. (C-ID ARTS 110) (A, CSU-GE, UC)
8 BEGINNING FIGURE DRAWING AND ANATOMY
3 units, 2 lecture hours, 4 lab hours,
(Formerly Art 8A)
ADVISORY: Eligibility for English 1A recommended.
Human anatomy for artists with the practice of drawing the human figure from the live model. (C-ID ARTS 200) (A, CSU, UC)

9 BEGINNING PAINTING: OIL/ACRYLIC
3 units, 2 lecture hours, 4 lab hours,
(Formerly Art 14A)
ADVISORY: Art 3 and 7 and eligibility for English 1A recommended.
Introduction to painting through the study of historical and contemporary processes, principles and best practices. Focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. (C-ID ARTS 210) (A, CSU-GE, UC)

10 BEGINNING CERAMICS
3 units, 2 lecture hours, 4 lab hours,
(Formerly Art 11A)
ADVISORY: Eligibility for English 1A recommended.
Introduction to ceramics materials, concepts, and processes including design principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across cultures. (A, CSU-GE, UC)

11 BEGINNING SCULPTURE
3 units, 2 lecture hours, 4 lab hours,
(Formerly Art 17A)
ADVISORY: Art 4.
Introduction to creative self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, glass casting, stone, wood, plaster, and new media such as installation and 3D printing/scanning. (A, CSU-GE, UC)

12A CRAFT WORKSHOP: LIVING TRADITIONS
3 units, 2 lecture hours, 4 lab hours,
(Formerly Art 48 and 12)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the materials, tools, processes and concepts of a variety of craft media (may include work in fibers, metal, leather, or wood). Cultural and historical traditions as well as contemporary work will be studied. (C-ID ARTS 280) (A, CSU-GE)

12B INTERMEDIATE CRAFT WORKSHOP: LIVING TRADITIONS
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 12A.
Further advanced exploration into the tools, materials, and processes of a variety of craft media (may include work in fibers, textiles, paper making, metal, wood, glass or leather). Cultural and historical traditions as well as contemporary work will continue to be studied. (A, CSU-GE)

13 BEGINNING WATERCOLOR PAINTING
3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to principles and practices of watercolor painting. Exploration of water media materials, processes, perceptual skills and color theory, paint mixing and technique, creative exploration of water based media. (A, CSU, UC)

14 BEGINNING PRINTMAKING
3 units, 2 lecture hours, 4 lab hours,
(Formerly Art 23)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the basic materials, equipment, and process of fine art printmaking, including relief (woodcut and linocut), intaglio (drypoint, etching, and collagraph), planography (lithography and monotype) and stencil (screenprint). (A, CSU-GE, UC)

15 CERAMIC SCULPTURE
3 units, 2 lecture hours, 4 lab hours,
(Formerly Art 12)
ADVISORY: Eligibility for English 1A recommended.
An introduction to ceramic sculpture as means of self expression by examining its historic and contemporary role in societies. Technical aspects of ceramic construction and coloring techniques will be introduced in the projects. (A, CSU-GE, UC)

16 LIFE PAINTING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 8 and 9. ADVISORY: Eligibility for English 1A recommended.
Introduction to figure painting from live model and reference. Develop perceptual skills, paint mixing and techniques for painting the figure, costumes and setting. (A, CSU, UC)
17 INTERMEDIATE DRAWING  
3 units, 2 lecture hours, 4 lab hours,  
(Formerly Art 7B)  
PREREQUISITE: Art 7 or Art 8 or demonstration of comparable skill level determined by a drawing portfolio.  
Exploration of artistic concepts, styles, and creative expression related to intermediate-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. (C-ID ARTS 205) (A, CSU-GE, UC)  

18 INTERMEDIATE FIGURE DRAWING AND ANATOMY  
3 units, 2 lecture hours, 4 lab hours,  
(Formerly Art 8B)  
PREREQUISITE: Art 8 or demonstration of comparable skill level determined by a drawing portfolio.  
Exploration of artistic concepts, style, and creative expression related to intermediate-level figure drawing. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and form. (A, CSU, UC)  

19 INTERMEDIATE PAINTING: OIL/ACRYLIC  
3 units, 2 lecture hours, 4 lab hours,  
(Formerly Art 14B)  
PREREQUISITE: Art 9 or demonstration of comparable skill level to be determined by testing and/or portfolio of past oil/acrylic painting work.  
Further investigation into painting through the study of historical and contemporary processes, principles and best practices. Deeper exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. (A, CSU, UC)  

20 INTERMEDIATE CERAMICS  
3 units, 2 lecture hours, 4 lab hours,  
(Formerly Art 11B)  
PREREQUISITE: Art 10 or 15. ADVISORY: Eligibility for English 1A recommended.  
An intermediate exploration of studio ceramics. Construction and decorative processes that promote self-expression will be presented. Contemporary practices of a studio artist will be presented. (A, CSU, UC)  

21 INTERMEDIATE SCULPTURE  
3 units, 2 lecture hours, 4 lab hours,  
(Formerly Art 17B)  
PREREQUISITE: Art 11 or demonstration of comparable skill level to be determined by testing and/or portfolio of past sculpture work.  
Concentrated self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, stone, wood, plaster, and new media such as installation and the use of digital technology. Students will be focusing on 2-3 of the above media and begin developing intermediate skills in their use. (A, CSU, UC)  

22B CRAFT WORKSHOP: CONCEPTS IN FIBERS  
3 units, 2 lecture hours, 4 lab hours  
ADVISORY: Eligibility for English 1A recommended.  
Introduction to basic materials, methods and vocabulary used in fiber and textile media as well as the hands-on development of expressive visual ideas. Contemporary as well as traditional history and cultural relevance of the fiber media is also explored. (A, CSU)  

23 INTERMEDIATE WATERCOLOR PAINTING  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: Art 13 or demonstration of comparable skill level to be determined by testing and/or portfolio of past watercolor work.  
Advanced studies in watercolor painting. Further exploration of water media processes, artistic expression and technique. (A, CSU, UC)  

24A INTAGLIO PRINTMAKING  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: Art 14.  
Intermediate-level intaglio printmaking. Topics may include etching, engraving, drypoint, aquatinting and photo-etching in creating editions of fine art prints. Emphasis is placed upon mastery and the creative use of these techniques. (A, CSU, UC)  

24B LITHOGRAPH PRINTMAKING  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.  
An examination of applied lithographic techniques, concentrating on process and aesthetic development. (A, CSU, UC)  

24C RELIEF PRINTMAKING  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.  
Intermediate-level relief printmaking processes, including experimentation with techniques in monotype, woodblock, linoleum block, and collage print techniques. (A, CSU, UC)
24D SCREENPRINTING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 14 or demonstration of comparable skill level to be determined by testing and/or portfolio of past printmaking work.
Intermediate-level screenprinting processes, including experimentation with techniques in photo, drawing, reductive screenprinting, multicolor on textiles, and cut film. (A, CSU, UC)

25 MURAL PAINTING
3 units, 2 lecture hours, 4 lab hours. Offered 1 semester each academic year.
ADVISORY: Eligibility for English 1A recommended. Art 7 and 9.
An exploration of the aesthetic and practical applications of mural painting, including historical background, planning, techniques and execution. (A, CSU, UC)

25A INTERMEDIATE MURAL PAINTING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 25. ADVISORY: Eligibility for English 1A recommended.
An advanced exploration of the aesthetic and practical applications of mural painting, including historical background, planning, techniques and execution. (A, CSU, UC)

27 ADVANCED DRAWING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 17 or demonstration of comparable skill level to be determined by testing and/or portfolio of past drawing work.
Exploration of artistic concepts, styles, and creative expression related to advanced-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students in this course will develop a personalized body of work and gain further experience in constructing and preparing drawing supports. (A, CSU)

28 ADVANCED FIGURE DRAWING AND ANATOMY
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 18 or demonstration of comparable skill level to be determined by testing and/or portfolio of past figure drawing and anatomy work.
Investigations for the advanced student of figure drawing into artistic concepts, style, creative expression, content and materials. Emphasis is on a personalized related body of work. (A, CSU, UC)

29 ADVANCED PAINTING: OIL/ACRYLIC
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 19 or demonstration of comparable skill level to be determined by testing and/or portfolio of past oil/acrylic painting work.
Advanced studies in the act of painting. Emphasis on original artistic voice and development of personal portfolio. (A, CSU, UC)

31 ADVANCED SCULPTURE
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 21 or demonstration of comparable skill level to be determined by testing and/or portfolio of past sculpture work.
Development of a portfolio of sculptural work through concentrated advanced self-expression in a variety of sculptural media which may include but is not limited to clay, steel fabrication, bronze casting, stone, wood, plaster, and new media such as installation, social sculptural and performance. (A, CSU, UC)

32A BEGINNING JEWELRY AND METALSMITHING
3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to wide-range of methods, techniques, and materials used to create jewelry and small metal objects. Introduction to the history of jewelry-making as well as to its cultural expressiveness worldwide. (A, CSU)

32B INTERMEDIATE JEWELRY AND METALSMITHING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 32A.
Further exploration into a wide-range of methods, techniques and materials used to create jewelry and small metal objects. Advanced exploration and research into the history of jewelry-making as well as to its cultural expressiveness worldwide. (A, CSU)

36A INTERMEDIATE WHEEL THROWING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 20.
Employing the Potter's Wheel to form functional and expressive pottery and forms. This course examines functional pottery from a contemporary studio practice and from a historic context. Advanced topics of glaze options and various forms will also be covered. (A, CSU, UC)

38A INTERMEDIATE HAND-BUILDING
3 units, 2 lecture hours, 4 lab hours
PREREQUISITE: Art 10 or 15.
Intermediate ceramic hand-building and exploration of clay and glaze chemistry. Historic study of ceramics as a major form of self expression. Students will be introduced to larger scale projects and alternate construction techniques. (A, CSU)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>INTRODUCTION TO DIGITAL ART/NEW MEDIA</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>Eligibility for English 1A recommended.</td>
<td>Introduction to the processes, principles, and tools of photography as a fine art studio practice. Topics include the development of aesthetic thinking, elements of design and composition, materials and equipment, and contemporary trends in photography. Emphasis is on the development of visual literacy and creative expression. (A, CSU)</td>
</tr>
<tr>
<td>55</td>
<td>INTRODUCTION TO ASIAN ART</td>
<td>3</td>
<td>3</td>
<td></td>
<td>English 1A.</td>
<td>Introduction to the arts of Asia, including China, Japan, Korea, India, and Southeast Asia. Cross-listed with ASAMER-55. (C-ID ARTH 130) (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>60</td>
<td>ART OF THE ANCIENT AMERICAS</td>
<td>3</td>
<td>3</td>
<td></td>
<td>Eligibility for English 1A recommended.</td>
<td>An introduction to the art and architecture of the indigenous cultures of Mesoamerica (Mexico &amp; Central America) and Andean South America prior to European contact. Featured cultures include Olmec, Maya, Toltec, Aztec, Paracas, Nazca, Moche, Wari &amp; Inca. (C-ID ARTH 145) (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>70</td>
<td>MODERN AND CONTEMPORARY ART</td>
<td>3</td>
<td>3</td>
<td></td>
<td>Eligibility for English 1A.</td>
<td>Survey of modern and contemporary art from the 19th to the 21st centuries. Chronological study of the major artistic styles and movements in Europe, the United States and the Global art world. (A, CSU-GE)</td>
</tr>
<tr>
<td>80</td>
<td>TOPICS IN ART</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>Examination of art and art historical topics, themes and cultures in conjunction with field studies and participation in departmental study abroad program. Course content to be determined by faculty in relation to the locale of the class. Course content may include lectures, seminars, and tours. (A, CSU)</td>
</tr>
</tbody>
</table>

**Asian-American Studies (ASAMER)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INDO-CHINESE AMERICANS</td>
<td>3</td>
<td>3</td>
<td></td>
<td>History, culture, and settlement in America of the peoples of Indo-China. The Vietnamese, Cambodian, Lao, and Hmong experience. (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>8</td>
<td>CHINESE CULTURE</td>
<td>3</td>
<td>3</td>
<td></td>
<td>Exploration of the history of Imperial China, the major religions/philosophies, and the culture of the Chinese. Cultural topics will include written language, martial arts, games, art, and mythology. (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>10</td>
<td>Hmong Culture</td>
<td>3</td>
<td>3</td>
<td></td>
<td>Explore historical and cultural background of Hmong people who have migrated into the United States of America. Examine their cultural identity, acculturation process, clan system, family dynamics, influential factors that shape their culture, and successes in America. (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>15</td>
<td>INTRODUCTION TO ASIAN-AMERICANS</td>
<td>3</td>
<td>3</td>
<td></td>
<td>Historical and cultural background of major Asian groups that have immigrated into the United States; including Chinese, Japanese, Filipinos, and Southeast Asians. Examines cultural identity, assimilation, interracial relationships, family influences, discrimination and generational conflict. (A, CSU-GE, UC, I)</td>
</tr>
</tbody>
</table>
20 ASIAN AMERICAN LITERATURE
3 units, 3 lecture hours,
(See also English 20)
PREREQUISITE: English 1A or equivalent.
Survey of Asian American classic and contemporary literature.
Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)

25 ASIAN-AMERICAN SOCIAL ISSUES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Issues of contemporary relevance related to Asian Americans: gender inequality, media representation, workplace concerns, crime, anti-Asian violence, race relations, the changing Asian American family and community, homosexuality, issues in education, and political involvement. (A, CSU-GE, UC, I)

30 ASIAN-AMERICAN WOMEN
3 units, 3 lecture hours, (See also Women’s Studies 30)
ADVISORY: Eligibility for English 1A recommended.
This course examines the historical, social, and cultural experiences of Asian American women from the late 1800s to the present. Topics include: immigration and settlement; labor participation; dating and marriage; family and career choices; inter-generational relations; participation in the labor market; media representations; violence against women; globalization and work; and movements for social change. (A, CSU-GE, UC, I)

55 INTRODUCTION TO ASIAN ART
3 units, 3 lecture hours, (See also Art 55)
ADVISORY: English 1A.
Introduction to the arts of Asia, including China, Japan, Korea, India, and Southeast Asia. Cross-listed with ART-55. (A, CSU-GE, UC, I)

ASTRONOMY (ASTRO)

10 BASIC ASTRONOMY
3 units, 2 lecture hours, 2 lab hours,
(generally evening only)
ADVISORY: Eligibility for English 1A recommended. Mathematics 201 recommended.
The night sky from our local solar system to the most distant objects in the universe, including observational and theoretical methods. The history of astronomical discovery, current investigations, cosmology, solar system dynamics, life cycle of stars and galaxies, constellation lore, and the role of gravity on a local and cosmic scale. Optional field trips. (A, CSU-GE, UC, I)

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY (ACRT)
FORMERLY BODY AND FENDER

151 BASIC ACR
9 units, 4 lecture hours, 16 lab hours, (Day Program), (Formerly Body-Fender 51/52)
ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 or Applied Technology 130 recommended.
Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. Not open to students that have completed Automated Collision Repair Technology 151B. (A)

151A BASIC ACR
4.5 units, 2 lecture hours, 8 lab hours
ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 recommended.
Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. (A)

151B BASIC ACR
4.5 units, 2 lecture hours, 8 lab hours
PREREQUISITE: Automotive Collision Repair 151A.
Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hand tools, power tools and equipment. Diagnosis and repair of minor/major collision damage and body alignment. Emphasis on automotive safety procedures and shop safety. (A)
153 ADVANCED ACR
9 units, 4 lecture hours, 16 lab hours, (Day Program), (Formerly Body-Fender 53/54)
PREREQUISITE: Automotive Technology Collision Repair 151.
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 or Applied Technology 130 recommended.
Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repaints, surface preparation on all types of substrates, paint materials used in refinishing, refinishing equipment, and other body shop repairs such as glass and trim removal and replacement. Emphasis on automotive safety procedures and shop safety. Not open to students that have completed Automotive Collision Repair Technology 153B. (A)

153A ADVANCED ACR
4.5 units, 2 lecture hours, 8 lab hours
ADVISORY: Welding Technology 2A and eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 recommended.
Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repairs, surface preparation on all types of substrates, paint materials used in refinishing, refinishing equipment, and other body shop repairs such as glass and trim removal and replacement. Emphasis on automotive safety procedures and shop safety. (A)

153B ADVANCED ACR
4.5 units, 2 lecture hours, 8 lab hours
Estimation of body repair and refinishing, analysis of mechanical components, repair of auto plastics, auto body panel replacement and adjustment, restoration of corrosion protection, application of materials for spot repair and complete repaints, surface preparation on all types of substrates, paint materials used in refinishing, refinishing equipment, and other body shop repairs such as glass and trim removal and replacement. Emphasis on automotive safety procedures and shop safety.

155 SPRAY REFINISHING
2 units, 1 lecture hour, 3 lab hours, (Formerly Body-Fender 55)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R and Mathematics 201 or Applied Technology 130 recommended.
Methods of prepping vehicles for spot repair and complete painting. Application of waterborne basecoat, solvent base coats and urthane clearcoats. (A)

AUTOMOTIVE COLLISION REPAIR (ACRCTC)

371 FUNDAMENTALS OF WELDING TECHNOLOGY AND WORKING SHEET METAL
2.78 lecture hours, 13.89 lab hours, (300 total hours), (Repeats = 3), (Pass/No Pass), (Open Entry/ Open Exit)
PREREQUISITE: None.
Theory and practice in MIG welding, oxyacetylene welding, steel rod, brazing rod, plasma cutter, metal shrinking, working sheet metal, welded panel replacement, restoring corrosion protection, hand tool technology, shop safety and efficiency, job success and ASE certification.

372 BODY WORK TECHNOLOGY
2.78 lecture hours, 13.89 lab hours, (300 total hours), (Repeats = 3), (Pass/No Pass), (Open Entry/ Open Exit)
PREREQUISITE: None.
Collision repair introductions and career. Includes estimating repair costs, vehicle construction and power tool technology, service specification and measurements, using body filler, doing hood, bumper, fender, lid, door, roof, and glass service. Looking at restraint system operation, passenger compartment, body/frame measurement, and unibody/frame realignment.

373 AUTOMOTIVE REFINISHING TECHNOLOGY
2.78 lecture hours, 13.89 lab hours, (300 total hours), (Repeats = 3), (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: None.
Compressed air technology, refinishing materials and fasteners, repairing plastics, refinishing equipment technology, vehicle surface preparation and masking, refinishing procedures, color matching and custom painting, and paint problems and final detailing.
AUTOMOTIVE TECHNOLOGY (AUTOT)

9 AUTOMOTIVE ESSENTIALS
3 units, 3 lecture hours, (Formerly Industrial Education 9)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Automotive components, service tools, and equipment. Designed for the prospective industrial arts teacher and students needing an exploratory course in the automotive field. (A, CSU)

10 INTRODUCTION TO DIESEL TECHNOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Introduction to the field of diesel-powered trucks and equipment maintenance and service. Shop safety, industrial fasteners, hydraulic fittings, technician tool requirements, service shop organization, service procedures, maintenance schedules, and measuring tools. Designed for students majoring in Diesel Technology or those interested in the industry. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student’s major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to automotive technology. Collaborative learning objectives established specific to automotive technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

51 PRINCIPLES OF ENGINE THEORY AND SERVICE
4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology GM 51),
(Formerly Automotive Mechanics 51)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Engine design and operation including diagnosis, failure analysis, and service practices. Designed to accompany work experience in the trade. (A, CSU)

52 AUTOMOTIVE ELECTRICAL SYSTEMS
4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology GM 52),
(Formerly Automotive Mechanics 52)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Basic electrical theory and operation of the automotive electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

53 ENGINE PERFORMANCE
4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology GM 53)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Engine theory and construction related to engine performance. History and theory of operation for the different types of automotive systems. Latest technologies in automotive fuel delivery, emission control, and ignition systems. Testing, diagnosing, and repairing fuel, emission, and ignition systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

54 SUSPENSION, STEERING, AND WHEEL ALIGNMENT
4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology GM 54),
(Formerly Automotive Mechanics 54)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Theory and practical application of basic 4-wheel alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

55 POWER TRAINS: TRANSMISSIONS/TRANSAXLES, DIFFERENTIALS, AND DRIVEAXLES
6 units, 6 lecture hours, 20 lab hours, (9 weeks),
(See also Automotive Technology GM 55),
(Formerly Automotive Mechanics 54)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
The principles of automotive power train systems: automatic and manual transmissions/transaxles, transfer cases, clutch assemblies, driveaxles, drivelines, and differentials. Diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)
56 AUTOMOTIVE BRAKING SYSTEMS
4 units, 1.5 lecture hours, 8 lab hours,
(See also Automotive Technology GM 56)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology GM 57),
(Formerly Automotive Technology 60)
PREREQUISITE: Automotive Technology 52 and 53 or equivalent. COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Theory and practice in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance automotive electronics, automatic temperature/climate control, and other computer controlled systems found on today’s late model vehicles. (A, CSU)

58 INDIVIDUALIZED SKILLS TRAINING (IST) CHASSIS SYSTEMS I LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Designed for students to complete assigned automobile manufacturers’ training modules: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

58A INDIVIDUALIZED SKILLS TRAINING (IST) CHASSIS SYSTEMS II LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Designed for students to complete assigned automobile manufacturers’ training modules in Advanced Chassis Systems: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

58B INDIVIDUALIZED SKILLS TRAINING (IST) ENGINE/PROPELION SYSTEMS LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Designed for students to complete assigned automobile manufacturers’ training modules in Advanced Chassis Systems: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

58C INDIVIDUALIZED SKILLS TRAINING (IST) POWER TRAIN SYSTEMS LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Designed for students to complete assigned automobile manufacturers’ training modules in Power Train Systems: Hand-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Automotive Technology. Designed to accompany work experience in the trade. (A, CSU)

61 DIESEL ENGINES
4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Diesel engine design and operation including diagnosis, failure analysis, and service practices. Designed for students who intend to develop service skills applicable to the diesel technology industry and to accompany work experience in the trade. (A, CSU)

62 ELECTRICAL/ELECTRONICS FOR DIESEL TECHNOLOGY
4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Electrical theory and operation of the diesel medium-duty/heavy-duty truck electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including truck computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)
63 DIESEL FUEL AND EMISSION SYSTEMS
4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Theory and operation for the different types of diesel technology engine performance and emission control systems. Latest technologies in diesel technology fuel delivery, emission control, and induction systems. Testing, diagnosing, and repairing fuel, emission, glow plug, and CAN network systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)

64 MD/HD SUSPENSION, STEERING, AND ALIGNMENT
4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Theory and practical application of Medium-duty/Heavy-duty truck, bus, and trailer alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

65 MD/HD POWERTRAIN SYSTEMS
6 units, 3 lecture hours, 10 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
The principles of diesel technology power train systems: automatic and manual transmissions, clutches, driveaxles, drivelines, and differential systems. Topics include transmission types, powerflow, disassembly, component inspection, reassembly guidelines, air shift systems, troubleshooting procedures, and gear ratio calculations. Maintenance, diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

66 MD/HD BRAKES AND PREVENTATIVE MAINTENANCE INSPECTION (PMI)
4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Complete disassembly and reassembly of various truck braking systems. The fundamentals of operation, wear analysis, preventive maintenance, and major service of truck undercarriages. Operating principles, component description, diagnosis, repair, and service adjustments of heavy-duty transportation and equipment air brake systems. Designed to accompany work experience in the trade. (A, CSU)

67 MD/HD HEATING, VENTILATION, AIR CONDITIONING AND ADVANCED ELECTRONICS
4 units, 1.5 lecture hours, 8 lab hours
PREREQUISITE: Automotive Technology 10, Automotive Technology 62, and Automotive Technology 63. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Theory and practice in truck and trailer heating, ventilation, and air-conditioning systems/components. Refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance truck/trailer electronics, automatic temperature/climate control, and other CAN/Computer controlled systems found on today's late model trucks/trailers. Designed to accompany work experience in the trade. (A, CSU)

68 INDIVIDUALIZED SKILLS TRAINING (IST) TRUCK & BUS CHASSIS SYSTEM I LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.
Designed for students to complete assigned truck and bus manufacturers' training modules: Hands-On (HO)/Instructor Led Training (ILT), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Basic Chassis Systems. Designed to accompany work experience in the trade. (A, CSU)

68A INDIVIDUALIZED SKILLS TRAINING (IST) TRUCK & BUS CHASSIS SYSTEM II LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.
Designed for students to complete assigned truck and bus manufacturers' training modules: Hands-On (HO)/Instructor Led Training (ILT), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Advanced Chassis Systems. Designed to accompany work experience in the trade. (A, CSU)
68B INDIVIDUALIZED SKILLS TRAINING (IST) TRUCK & BUS ENGINE/PROPULSION SYSTEMS
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.
Designed for students to complete assigned truck and bus manufacturers’ training modules: Hands-On (HO)/Instructor Led Training (ILT), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Engine/Propulsion Systems. Designed to accompany work experience in the trade. (A, CSU)

68C INDIVIDUALIZED SKILLS TRAINING (IST) TRUCK & BUS POWER TRAIN SYSTEMS LABORATORY
1 unit, 4 lab hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic is recommended.
Designed for students to complete assigned truck and bus manufacturers’ training modules: Hands-On (HO)/Instructor Led Training (ILT), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Video-Based Training (VBT) with instructor supervision. Provide the most current and up-to-date technology for students pursuing a career in Diesel Technology Power Train Systems. Designed to accompany work experience in the trade. (A, CSU)

109L AUTOMOTIVE ESSENTIALS LABORATORY
1 unit, 3 lab hours
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Automotive essential laboratory to include: automotive components, service tools, procedures, and equipment. Designed for the prospective industrial arts teacher and students needing an exploratory course in the automotive field. (A)

110A AUTOMOTIVE EXPRESS SERVICE TECHNICIAN
2 units, 1 lecture hour, 3 lab hours
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
Apply the principles and applications required to perform the duties of an Express Service Technician at an automotive service facility. Skills and tools required to perform the various tasks of the Express Service Technician will be discussed and practiced in laboratory exercises. Customer satisfaction will be the foremost topic of all work developed by the student. Designed to accompany work experience in the trade. (A)

110B AUTOMOTIVE SERVICE CONSULTANT
2 units, 1 lecture hour, 3 lab hours
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
Apply the basic principles and applications required to perform the duties of an Automobile Service Consultant. Customer relations and customer satisfaction will be the foremost topic of all work developed by the student. Designed to accompany work experience in the trade. (A)

110C AUTOMOTIVE PARTS SPECIALIST
2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
Apply the basic principles and applications required to perform the duties of an Automobile Parts Specialist. Customer relations will be the foremost topic of all work developed by the student. Designed to accompany work experience in the trade. (A)

161A LEVEL 1 – ENGINE AND EMISSION CONTROL FUNDAMENTALS
3 units, 2 lecture hours, 3 lab hours
(Formerly Automotive Technology 61, 61A and 261A)
PREREQUISITE: Automotive Technology 52, and 53, or 261, or 10 semester units, 13 quarter units, or 180 hours of instruction at a NATEF certified and/or bureau-recognized college or trade school in the areas of electrical and engine performance. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
Designed to prepare students for the Bureau of Automotive Repair Smog Check Licensing Exam. Level 1 Training provides students with basic knowledge of engine and emission controls needed to move forward with Level 2 Smog Procedures Training. Smog check rules and regulations covered in detail. Introduction to Smog Check Program inspection procedures and policies mandated by the Bureau of Automotive Repair. Those who do not meet prerequisites/automotive experience are allowed to take this course but will not be certified as eligible to take the licensing examination. (A)
161B LEVEL 2 – SMOG CHECK PROCEDURES TRAINING
1.5 units, 1.5 lecture hours, 1 lab hours, (Formerly Automotive Technology 61B and 261B)
PREREQUISITE: Automotive Technology 161A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
Prepares students/technicians for the Bureau of Automotive Repair (BAR) Enhanced Area emission testing procedures and guidelines. This training provides students the procedural knowledge, skills, and abilities needed to perform Smog Check inspections. Students who complete and pass this training will have met the Bureau’s training requirements to qualify to take the Smog Check Inspector state licensing examination. Introduction to on-vehicle diagnosing and repair mandated by the Bureau of Automotive Repair. Those who do not meet the prerequisite are allowed to take this course but will not be certified as eligible to take the (BAR) licensing examination. (A)

161C BAR UPDATE TRAINING
1 unit, 4 lecture hours, 4 lab hours, (2 weeks), (Formerly Automotive Technology 261C)
PREREQUISITE: Automotive Technology 161B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
Prepares students/technicians for new Bureau of Automotive Repair (BAR) procedures and guidelines Smog Check technicians must follow when performing emission inspections and certifying vehicles in the Basic and Enhanced Smog Check Program areas. Those who do not meet the prerequisite are allowed to take this course but will not be certified as eligible to take the (BAR) licensing examination and/or granted renewal of applicable license. (Note: Enhanced Area Technician training program certified). (A)

162A BEGINNING PERFORMANCE TUNING
3 units, 2.5 lecture hours, 2 lab hours
PREREQUISITE: Automotive Technology 161B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
This beginning tuning course is designed for tuning with Stage 1 custom designed Tuning Checklists and Tuning Software. Emphasis will be focusing on three types of car combinations: bolt-on’s, heads/cam combos, and forced induction (turbochargers/superchargers/nitrous). (A)

162B ADVANCED PERFORMANCE TUNING
3 units, 2.5 lecture hours, 2 lab hours
PREREQUISITE: Automotive Technology 162A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
This advanced tuning course is designed for tuning with Stage 2 and/or 3 custom designed Tuning Checklists and Tuning Software. Emphasis will be focusing on three types of advanced modifications: heads/cam combos, internal engine components, and forced induction (turbochargers/superchargers/nitrous). Advanced power tuning with MAF, Speed Density, and BAR systems will also be covered. (A)

170A INTRODUCTION TO HYBRID ELECTRICAL VEHICLES (HEVS)
2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Automotive Technology/Automotive Technology GM 57. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
This course is designed to familiarize the construction, theory, and operation of the Hybrid Electric Vehicle (HEV). Includes high voltage safety, engines, electric motors, power inverters, DC to DC converters, battery construction and technologies, regenerative braking, and HVAC systems. (A)

170B SERVICE AND MAINTENANCE TO HYBRID ELECTRICAL VEHICLES (HEVS)
2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 170A. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
This course is designed to familiarize with the hybrid safety, hybrid transmissions, parallel/series, electric motors, batteries, control module units, hybrid internal combustion engines (ICE), power inverter systems, AC induction electric motors, and permanent magnet electric motors theory and construction. Inspection, maintenance, and service procedures on Hybrid Electric Vehicle (HEVs) systems will be emphasized. (A)

170C DIAGNOSIS AND REPAIR TO HYBRID ELECTRIC VEHICLES (HEVS)
2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 170B. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
This course is designed to familiarize with hybrid safety, hybrid transmissions, parallel/series, electric motor failure diagnosis, battery failure diagnosis, control module failure diagnosis, battery reconditioning and rebuilding review, hybrid internal combustion engines (ICE), power inverter system, AC induction electric motors, and permanent magnet electric motors. This course will emphasize diagnosis and repairs to Hybrid Electric Vehicles (HEVs). (A)
171A INTRODUCTION TO ALTERNATIVE FUELED VEHICLES (AFVS)
2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Automotive Technology 170C. ADVISORY:
Eligibility for English 125 and 126 and Mathematics 201 recommended.
This is an introductory course on Alternative Fueled Vehicles (AFVs). Various alternative fuels will be compared, such as Ethanol, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), Liquefied Petroleum Gas (LPG) and Clean Diesel. The theory of operation, system components, and safe handling of these fuels are included. (A)

171B SERVICE AND MAINTENANCE TO ALTERNATIVE FUELED VEHICLES (AFVS)
2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 171A. ADVISORY:
Eligibility for English 125 and 126 and Mathematics 201 recommended.
This course is designed to familiarize with the hybrid safety, hybrid transmissions, parallel/series, electric motors, batteries, control module units, hybrid internal combustion engines (ICE), power inverter systems, AC induction electric motors, and permanent magnet electric motors theory and construction. Inspection, maintenance, and service procedures on Hybrid Electric Vehicle (HEVs) systems will be emphasized. (A)

171C DIAGNOSIS AND REPAIR TO ALTERNATIVE FUELED VEHICLES (AFVS)
2 units, 1 lecture hour, 3 lab hours
PREREQUISITE: Automotive Technology 171B. ADVISORY:
Eligibility for English 125 and 126 and Mathematics 201 recommended.
This course is designed to familiarize with diagnosis and repair on Alternative Fueled Vehicles (AFVs). Emphasis will be placed on Ethanol, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), Liquefied Petroleum Gas (LPG) and Clean Diesel type fuel systems. (A)

261 BAR SPECIFIED DIAGNOSIS AND REPAIR TRAINING
3 units, 2 lecture hours, 3 lab hours,
(Formerly Automotive Technology 61)
PREREQUISITE: Automotive Technology 52 or 53 or 9 semester units, 13 quarter units, or 180 hours of instruction at a NATEF certified and/or bureau recognized college or trade school in the areas of electrical and engine performance. ADVISORY: Eligibility for English 125 and 126 and Mathematics 201 recommended.
Introduction to Smog Check Program diagnosis and repair procedures; engine theory, engine performance, and electrical systems; automotive computer control system operations; on-vehicle diagnosing and repair mandated by the Bureau of Automotive Repair. The training provides students with comprehensive knowledge related to the diagnosis and repair of Smog Check failures.

281A AUTOMOTIVE POWER TRAINS I
3 units, 3 lecture hours, (Formerly Automotive Technology 81A)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
The principles of automotive power train systems: automotive transmissions, drivelines, and differentials. Diagnosis and service methods.

281B AUTOMOTIVE POWER TRAINS II
3 units, 3 lecture hours, (Formerly Automotive Technology 81B)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
The principles of automotive power train systems: automatic transaxes, driveaxles, and transfer cases. Diagnosis, service, and repair procedures.

282A SUSPENSION AND WHEEL ALIGNMENT
3 units, 3 lecture hours, (Formerly Automotive Technology 82A)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Theory of basic 4-wheel alignment and suspension systems. Operating principles, component description, diagnosis, and service adjustment spec.

282B AUTOMOTIVE BRAKING SYSTEMS
3 units, 3 lecture hours, (Formerly Automotive Technology 82B)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Discuss complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments.

283A ENGINE PERFORMANCE AND DIAGNOSIS
3 units, 3 lecture hours, (Formerly Automotive Technology 83A)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Latest technologies in automotive fuel delivery, emission control, and ignition systems. Diagnosis fuel, emission ignition systems. Introduction of diesel theory, application, and operation. Use of necessary test equipment.
283B ELECTRICAL SYSTEMS
3 units, 3 lecture hours, (Formerly Automotive Technology 83B)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Basic electrical theory of the automotive electrical components and systems. Diagnosing electrical components and systems including automotive computer controls using necessary equipment.

284 AUTOMOTIVE AIR CONDITIONING
3 units, 3 lecture hours, (Formerly Automotive Technology 84)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Theory in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Discuss the diagnosis, service, and repair of automatic temperature/climate control.

285 AUTOMOTIVE ENGINES
3 units, 3 lecture hours, (Formerly Automotive Technology 85)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Engine design and operation including diagnosis, failure analysis, and service practices.

286 AUTOMOTIVE INFORMATION SYSTEMS
3 units, 3 lecture hours, (Formerly Automotive Technology 86)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Automotive service information for components, specifications, procedures, tools, and equipment. Designed for the automotive technology student or automotive technician in the field.

287 STREET ROD TECHNOLOGY
4 units, 2 lecture hours, 7 lab hours
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 recommended.
Modification of older vehicles to incorporate new technology from newer vehicles.

292 ASE CERTIFICATION PREPARATION
2 units, 2 lecture hours, (Formerly Automotive Technology 92)
PREREQUISITE: Automotive Technology 9 or equivalent.

294 BRAKE AND LAMP ADJUSTMENT/ CERTIFICATION PREPARATION
2 units, 2 lecture hours, 0.5 lab hours, (Formerly Automotive Technology 94)
PREREQUISITE: Automotive Technology 9 or equivalent.
Preparation for the State of California Automotive Technician Brake and Lamp Adjustment/Certification examination.

373 FORK LIFT SAFETY AND OPERATION
1 lecture hour, 3 lab hours, (20 weeks), (Repeats = 3), (Pass/No Pass)
PREREQUISITE: None.
Practical and theoretical training in the operation of forklift and pallet jack and how it works. Students receive training while driving on a planned course, loading and unloading commercial vehicles and load securement, with a continuous emphasis on safe driving and operation. Students also develop their skills in minor maintenance for good pre-trip and post-trip inspection.

374 STATE LAWS AND FEDERAL REGULATIONS
1 lecture hour, (20 weeks), (Repeats = 3), (Pass/No Pass)
PREREQUISITE: None.
Provide students with an understanding of California and federal motor vehicle traffic laws, highway traffic regulations, and driver’s license laws needed to understand and demonstrate the ability to drive in accordance with laws and regulations.

375 SAFE OPERATION FUNDAMENTALS
6 lab hours, (20 weeks), (Repeats = 3), (Pass/No Pass)
PREREQUISITE: None.
Provide practical and theoretical instruction in the techniques needed to drive defensively and prevent accidents in spite of the incorrect actions of others and adverse conditions. Students are prepared to recognize and perform first aid treatment in dealing with major emergencies, both medical and accidental. The course also explains and demonstrates safe practices in using and selecting proper tools for the job, both in the shop and on the road.
376 OPERATIONS OF COMMERCIAL VEHICLES I
1 lecture hour, 6 lab hours, (20 weeks), (Repeats = 3), (Pass/No Pass)
PREREQUISITE: None.
Provide practical and theoretical knowledge in the operation of two- and three-axle tractor trailer combinations on a driving range and highway. Student will develop the hand, eye, and foot coordination for shifting a 10-speed dual-range transmission. Additionally students will be oriented in California state laws pertaining to a commercial motor vehicle, which prepares them for the CDL Skills and Knowledge Test for the Class A license.

377 OPERATIONS OF COMMERCIAL VEHICLES II
9 lab hours, (20 weeks), (Repeats = 3), (Pass/No Pass)
PREREQUISITE: Automotive Technology 376.
Provide practical and theoretical knowledge in the operation of five-axle commercial vehicles with a GVWR of 80,000 lbs. and lengths over 65 feet, including single and double trailers. Students will learn to operate various types of dual-range transmissions on the driving range and in real-life city and highway traffic. Students will receive 2,000 – 2,500 miles of road experience with empty and loaded trailers.

AUTOMOTIVE MECHANICS (AMCTC)

371 ENGINE REPAIR
11.11 lecture hours, 22.33 lab hours, (600 total hours), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly AMVTC 71)
Preparation for ASE certification in engine repair. Practical and theoretical training in general engine diagnosis, cylinder heads, valve train, engine block, lubrication, and cooling systems.

372 ENGINE PERFORMANCE
16.67 lecture hours, 33.33 lab hours, (900 total hours), (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit), (Formerly AMVTC 72)
Basic skills necessary for an entry level job. Competency-based similar to those operations performed by automotive shop professionals. Prepares students to take the ASE certification tests.

375 AUTOMOTIVE BRAKE SYSTEMS
1 lecture hour, 1.8 lab hours, (Pass/No Pass), (Repeats = 3)
Diagnose, service, and repair, braking systems related to automotive vehicles.

AUTOMOTIVE TECHNOLOGY: GENERAL MOTORS ASEP PROGRAM (ATGM)

51 PRINCIPLES OF ENGINE THEORY AND SERVICE
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 51)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Engine design and operation including diagnosis, failure analysis, and service practices. Designed to accompany work experience in the trade. (A, CSU)

52 AUTOMOTIVE ELECTRICAL SYSTEMS
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 52), (Formerly Automotive Technology General Motors 32)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Basic electrical theory and operation of the automotive electrical components and systems. Testing, diagnosing, and repairing electrical components and systems including automotive computer controls using necessary equipment. Designed to accompany work experience in the trade. (A, CSU)

53 ENGINE PERFORMANCE
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 53), (Formerly Automotive Technology General Motors 32)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Engine theory and construction related to engine performance. History and theory of operation for the different types of automotive systems. Latest technologies in automotive fuel delivery, emission control, and ignition systems. Testing, diagnosing, and repairing fuel, emission, and ignition systems. Use of necessary test equipment. Designed to accompany work experience in the trade. (A, CSU)
54 SUSPENSION, STEERING, AND WHEEL ALIGNMENT
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 54), (Formerly Automotive Technology General Motors 31)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Theory and practical application of basic 4-wheel alignment, steering, and suspension systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

55 POWER TRAINS: TRANSMISSIONS/TRANSAXLES, DIFFERENTIALS, AND DRIVEAXLES
6 units, 6 lecture hours, 20 lab hours, (9 weeks), (See also Automotive Technology 55), (Formerly Automotive Technology General Motors 36)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
The principles of automotive power train systems: automatic and manual transmissions/transaxles, transfer cases, clutch assemblies, driveaxles, drivelines, and differentials. Diagnosis, service, and repair. Designed to accompany work experience in the trade. (A, CSU)

56 AUTOMOTIVE BRAKING SYSTEMS
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 56)
COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Complete disassembly and reassembly of various automotive braking systems. Operating principles, component description, diagnosis, repair, and service adjustments. Designed to accompany work experience in the trade. (A, CSU)

57 AUTOMOTIVE HEATING, VENTILATION, AIR CONDITIONING, AND ADVANCED ELECTRONICS
4 units, 1.5 lecture hours, 8 lab hours, (See also Automotive Technology 57), (Formerly Automotive Technology General Motors 34)
PREREQUISITE: Automotive Technology/Automotive Technology GM 52 and 53 or equivalent. COREQUISITE: Automotive Technology 9. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Theory and practice in automotive heating, ventilation, and air conditioning systems/components. R-12 and R-134A refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advance automotive electronics, automatic temperature/climate control, and other computer controlled systems found on today's late model vehicles. (A, CSU)

BIOLOGY (BIOL)

3 INTRODUCTION TO LIFE SCIENCE
4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introductory course exploring biological concepts as they relate to organismal structure and function, inheritance, ecology, and evolution. Recommended for non-biological science majors and liberal studies majors. Field trips required. (A, CSU-GE, UC, I)

4 PRINCIPLES OF ZOOLOGY
5 units, 3 lecture hours, 6 lab hours, (Formerly Zoology 1)
PREREQUISITE: Mathematics 103 or equivalent with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.
Animal forms using the evolutionary approach including morphology, physiology, and ecology relative to the major phyla. Field trips required. (C-ID BIOL 130S = BIOL 4 + BIOL 6) (A, CSU-GE, UC, I)

5 HUMAN BIOLOGY
4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
An overview of the cellular, molecular, genetic, and systems basis of life with an emphasis on the human body. For allied health majors. Fulfills prerequisites for Biology 20, 21A and 31. (A, CSU-GE, UC, I)

6 PRINCIPLES OF BOTANY
5 units, 3 lecture hours, 6 lab hours, (Formerly Botany 1)
PREREQUISITE: Mathematics 103 or equivalent with a grade of "C" or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.
Morphological, physiological, ecological, genetic, and taxonomic relationships with emphasis on seed plants. Field trips required. (C-ID BIOL 130S = BIOL 6 + BIOL 4) (A, CSU-GE, UC, I)
7  FIELD BIOLOGY
5 units, 3 lecture hours, 6 lab hours, (Spring)
PREREQUISITE: Biology 3 or 11A with a grade of “C” or better. Completion within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.
Investigation of plants, animals, and fungi emphasizing natural history, taxonomy, and ecology of local species and methods of field based ecological investigation. Weekly required field trips with easy to moderate hiking and a multi-day field trip to the Pacific coast are included in this course. (A, CSU-GE, UC)

11A  BIOLOGY FOR SCIENCE MAJORS I
5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 103 and Chemistry 1A within the last five years recommended. ADVISORY: Eligibility for English 1A recommended.
One of two general biology courses for majors: the chemistry of life, cellular structure, cellular metabolism including photosynthesis, aerobic and anaerobic respiration, cellular communication, cellular division and its regulation, Mendelian genetics, molecular genetics, biotechnology, and evolution. Intended for science majors and pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. (C-ID BIOL 190) (A, CSU-GE, UC, I)

11AH HONORS BIOLOGY FOR SCIENCE MAJORS I
5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Chemistry 1A and Mathematics 103, within the last five years recommended. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
One of two general biology courses for majors: the chemistry of life, cellular structure, cellular metabolism including photosynthesis, aerobic and anaerobic respiration, cellular communication, cellular division and its regulation, Mendelian genetics, molecular genetics, biotechnology, and evolution. Intended for science majors and pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. (C-ID BIOL 190) (A, CSU-GE, UC, I)

11B  BIOLOGY FOR SCIENCE MAJORS II
5 units, 3 lecture hours, 6 lab hours
PREREQUISITE: Mathematics 103 within the last five years recommended. ADVISORY: Eligibility for English 1A recommended. Biology 11A.

One of two general biology courses for majors: evolution, speciation, the evolutionary history of biodiversity, plant structure and function, animal structure and function, and ecology. Intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips required. (C-ID BIOL 140) (A, CSU-GE, UC, I)

14  CONSERVATION BIOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introductory course in conservation biology. An exploration of phenomena influencing Earth’s biological diversity with an emphasis on ecological principles and human impacts. A focus on natural resource use, management and future challenges for a growing human population. (A, CSU-GE, UC, I)

20  HUMAN ANATOMY
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Biology 5 or 11A. COREQUISITE: Chemistry 3A. ADVISORY: Eligibility for English 1A recommended.
The first class in a two semester human anatomy and physiology sequence. Biology 21A and 21B are designed to prepare students planning careers in healthcare including nursing. Not open to students with credit in both Biology 20 and Biology 22. (C-ID BIOL 115S = BIOL 21A + 21B) (A, CSU-GE, UC, I)

21A  HUMAN ANATOMY & PHYSIOLOGY I
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Biology 5 or 11A. COREQUISITE: Chemistry 3A. ADVISORY: Eligibility for English 1A recommended.
The first class in a two semester human anatomy and physiology sequence. Biology 21A and 21B are designed to prepare students planning careers in healthcare including nursing. (C-ID BIOL 115S = BIOL 21A + 21B) (A, CSU-GE, UC, I)

21B  HUMAN ANATOMY & PHYSIOLOGY II
5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Biology 21A and Chemistry 3A. ADVISORY: English 1A.
The second class in the semester anatomy and physiology sequence. Biology 21A and 21B are designed to prepare students planning careers in healthcare, including nursing. (C-ID BIOL 115S = BIOL 21A + 21B) (A, CSU-GE, UC, I)
22 HUMAN PHYSIOLOGY
5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Biology 20 and Chemistry 3A, completion within the last year recommended. ADVISORY: English 1A.
An examination of the functional relationships of the human body at the system, organ, and cellular levels, utilizing homeostasis as a unifying theme. Fulfills the physiology requirement for many nursing and other health-related programs. (C-ID BIOL 120B) (A, CSU-GE, UC, I)

31 MICROBIOLOGY
5 units, 3 lecture hours, 5 lab hours
PREREQUISITE: Biology 5 or 11A or equivalent and Chemistry 3A or equivalent, each with a grade "C" or better. Completion within the last five years recommended. ADVISORY: English 1A.
Classification, morphology, identification, physiology, genetics, host microbe interactions related to disease and industrial uses of microorganisms. Field trips may be required. (A, CSU-GE, UC, I)

46 ELEMENTARY HORTICULTURE
4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
Growth and care of ornamental and vegetable plants including plant anatomy, general maintenance, weeds, pests, diseases, fertilizers, soils, pruning, and training. (A, CSU)

47 TOPICS IN BIOLOGY
1-3 units, 1-3 lecture hours, 0-3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Current topics of biological importance and concern outside the regular biology curriculum or topics that will be covered in greater depth than in a regularly offered course. (A, CSU)

55 INTRODUCTION TO THE BIOLOGY OF HUMANS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introductory human biology class without a laboratory. Designed for students planning to enter medical coding or HIT programs. Not an acceptable prerequisite for Biology 20 or Biology 21A. (A, CSU-GE, I)

222 BIOLOGY SKILLS
1 unit, 2 lecture hours, (9 weeks), (Pass/No Pass)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 67 and 68 and Mathematics 201 recommended.
An introductory class for students seeking to develop foundation skills in biological science.

BODY AND FENDER
SEE AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

BOTANY
SEE BIOLOGY

BUILDING TECHNOLOGY
SEE ARCHITECTURE OR CONSTRUCTION

BUSINESS ADMINISTRATION (BA)

5 WORKPLACE COMMUNICATION
3 units, 3 lecture hours, (See also Business & Technology 5)
ADVISORY: Eligibility for English 1A recommended. Business & Technology 1 and 112 recommended.
Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. (A, CSU)

10 INTRODUCTION TO BUSINESS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization’s policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices. (C-ID BUS 110) (A, CSU, UC)

10H HONORS INTRODUCTION TO BUSINESS
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.
A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization’s policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices. (C-ID BUS 110) (A, CSU, UC)
18 **BUSINESS AND THE LEGAL ENVIRONMENT**
4 units, 4 lecture hours, (Formerly Business Administration 18A)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Law and the legal system: administrative, tort, criminal, contracts, agency, labor and employment, and international business law. Case studies utilized. (C-ID BUS 120) (A, CSU, UC)

19 **WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL**
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional.

Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to business administration. Collaborative learning objectives established specific to business administration. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

20 **LAW AND THE LEGAL SYSTEM**
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.

What every educated citizen should know about law as a social process and about American law and legal institutions. The historical origins of law as well as the role law plays in modern western and non-western societies. Institutional sources of law; legal reasoning; judicial decision making and remedies; an overview of the civil and criminal litigation process; administrative law and procedure; alternative dispute resolution mechanisms; ethics and the legal system. (A, CSU-GE, UC)

24 **NEGOTIATIONS**
1.5 units, 1.5 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Negotiations in real-life professional and personal situations. Theory of negotiation as practiced in a variety of settings including: preparing, measuring, conduction and debriefing individual and group negotiations. (A, CSU)

25 **INTERNATIONAL BUSINESS — AN INTRODUCTION**
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

A study of the theory and practice of global business. Within the context of a multinational business a study of the functional areas of production, marketing, finance, human resource management, accounting, technology, legal issues and the impact of culture on the business practices. (A, CSU)

27 **ENTREPRENEURSHIP STARTUP LAB**
1-3 units: 1 unit, 1 lecture hour, 1 lab hour; 2 units, 1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours
ADVISORY: Eligibility for English 1A recommended.

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. (A, CSU)

28 **E-LAW AND ETHICS**
3 units, 3 lecture hours
ADVISORY: Computer Information Technology 15. Eligibility for English 1A recommended.

An introduction to the legal and ethical issues involving technology and the use of the Internet. (A, CSU)

30 **PERSONAL FINANCE**
3 units, 3 lecture hours
ADVISORY: Business Administration 10. Eligibility for Mathematics 201 recommended.

Examines personal financial management from an economic and behavioral perspective. Emphasis on the life-long impact financial decisions have on individuals, families and society. Topics include time value of money, opportunity cost and marginal analysis; tax strategies; financial planning strategies; financial monitoring and reporting; money & credit management; purchasing strategies and large asset acquisition; risk management through home, health, auto and disability insurance; saving and investing; and retirement and estate planning. (A, CSU-GE, UC)

31 **HUMAN RESOURCE MANAGEMENT**
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.

Examines major functions of human resource management including planning, recruitment, selection, training and development, evaluation, compensation, labor relations, and motivation. (A, CSU)
33 HUMAN RELATIONS IN THE WORKPLACE
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.
Multidisciplinary examination of how society, economics, and human behavior are inextricably interwoven into the American work environment. An emphasis on employee interaction with coworkers, clients, supervisors/managers, and their effect on the total organization. Emphasis on communication, societal and cultural differences, conflict resolution, ethics and politics, career selection and entry, inter-personal relations, motivation, leadership, attitude, and group dynamics. (A, CSU)

34 FUNDAMENTALS OF INVESTING
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and 30 recommended. Eligibility for English 1A recommended. Eligibility Mathematics 201 recommended.
Study of basic investment theory and practice including security valuation. Includes strategies for investments in government securities, corporate bonds, stocks, mutual funds and basic derivatives. (A, CSU)

35 FINANCIAL MANAGEMENT FOR ENTREPRENEURS AND SMALL BUSINESS
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A and Mathematics 201 recommended.
Basic financial decision-making for business owners, entrepreneurs and financial managers. Financial statement analysis, working capital management, capital budgeting, time value of money, sources of funding, and financial markets and institutions. (A, CSU)

38 OPERATION OF THE SMALL BUSINESS
3 units, 3 lecture hours
PREREQUISITE: Business Administration 52 or equivalent experience creating, operating, or managing a startup or established business. ADVISORY: Eligibility for English 1A recommended.
A systematic approach to developing and managing a small business including the development of a formal, comprehensive business plan. Emphasis on discussions and practical exercises to develop expertise in the operations, marketing, human resource utilization, and financing of the small business venture. (A, CSU)

40 SUPERVISION AND LEADERSHIP
3 units, 3 lecture hours, (Formerly Business Administration 39)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.
Focus on first-level (operational) supervision. Emphasis on planning, organizing, staffing, leading, and controlling. (A, CSU)

43 PRINCIPLES OF MANAGEMENT
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.
In-depth study of the primary management functions including: strategic and tactical planning; decision-making; organizational design and systems; leadership, motivation and communication; and control systems. (A, CSU)

44 WOMEN IN MANAGEMENT
3 units, 3 lecture hours, (See also Women’s Studies 44)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.
Management and entrepreneurial behaviors for women seeking leadership skills, particularly for managers and those aspiring to executive levels. (A, CSU)

48 E-BUSINESS
3 units, 3 lecture hours, (Formerly eCommerce 1)
ADVISORY: Computer Information Technology 12 or 15; eligibility for English 1A and Mathematics 201 recommended.
A study of the nature and environment of electronic commerce and its strategic implications including: information technology infrastructure; marketing and business models; ethical, financial, legal and global strategic implications; the value chain and enterprise resource planning. (A, CSU)

49 BUSINESS PROTOCOL FOR ENTREPRENEURS
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Provides skill building application of business protocol required for entrepreneurs and those involved in business start-ups. (A, CSU)

50 BUSINESS CONCEPTS
2 units, 2 lecture hours, (Formerly Business Administration 9)
ADVISORY: Eligibility for English 1A recommended.
A study of business basics for entrepreneurs. Topics include marketing, finance, strategic planning, personnel management, basic macroeconomic principles and an assessment of entrepreneurial readiness. Primarily for nonbusiness majors or those just beginning the study of business but interested in entrepreneurship. (A, CSU)
51 BUSINESS PLANNING AND NEW VENTURE LAUNCH
1.5 units, 1.5 lecture hours
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.
Business plan development. Review of resources available to assist entrepreneurs in developing and launching a business including sources of funding. (A, CSU)

52 INTRODUCTION TO ENTREPRENEURSHIP
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Develops an understanding of the complex tasks faced by individuals engaged in entrepreneurial activities. Identifies the methods for developing a business idea, the process of starting a business, how to acquire resources, and the key parts of a business plan. (A, CSU)

58 BUSINESS MORALITY AND ETHICS
1.5 units, 1.5 lecture hours
ADVISORY: Business Administration 10, and eligibility for English 1A recommended.
Applied business ethics and its relationship to free markets, marketing, finance, and the law. Topics cover key issues including management’s responsibility for accountability, corporate governance, accounting practices, stakeholder relations, and ethical decision. (A, CSU)

101 BASIC PROFESSIONAL AND CIVIC BEHAVIORS
0.25 unit, 0.27 lecture hour, (Pass/No Pass)
PREREQUISITE: None.
Introduces basic mindsets, life, and work skills necessary for professional success and civic engagement. (A)

102 INTERMEDIATE PROFESSIONAL AND CIVIC BEHAVIORS
0.25 unit, 0.27 lecture hour, (Pass/No Pass)
PREREQUISITE: Business Administration 101.
Introduces intermediate mindsets, life, and work skills necessary for professional success and civic engagement. (A)

103 ADVANCED PROFESSIONAL AND CIVIC BEHAVIORS
0.25 unit, 0.27 lecture hour, (Pass/No Pass)
PREREQUISITE: Business Administration 101 and 102.
Advanced exploration of mindsets, life, and work skills required for target career and civic engagement. (A)

104 APPLIED PROFESSIONAL AND CIVIC BEHAVIORS
0.25 unit, 0.27 lecture hour, (Pass/No Pass)
PREREQUISITE: Business Administration 101, 102, and 103.
Creation of action plans that integrate life skills, work skills, and mindsets into targeted career and specific civic engagement project. (A)

310 INTRODUCTION TO BUSINESS
3 lecture hours, (Repeats = 3), (Pass/No Pass)
ADVISORY: Eligibility for English 1A recommended.
A multidisciplinary survey of the U.S. business environment including the examination, analysis, reasoning, advocacy, and critique of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization’s policy, practices, and ability to achieve its goals. Demonstrates how these influences impact key areas of business including: organizational structure and design; management; marketing; organizational communication; technology; and financial practices.

333 HUMAN RELATIONS IN THE WORKPLACE
3 lecture hours, (Repeats = 3), (Pass/No Pass)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.
Multidisciplinary examination of how society, economics, and human behavior are inextricably interwoven into the American work environment. An emphasis on employee interaction with coworkers, clients, supervisors/managers, and their effect on the total organization. Emphasis on communication, societal and cultural differences, conflict resolution, ethics and politics, career selection and entry, inter-personal relations, motivation, leadership, attitude, and group dynamics.

BUSINESS & TECHNOLOGY (BT)

1 COMPUTER DOCUMENT PROCESSING I
4 units, 3 lecture hours, 3 lab hours,
(Formerly BSS 1A and Business Information Processing 1)
ADVISORY: Eligibility for English 1A recommended.
Producing basic correspondence, letters, memos, tables, and reports, using current word processing program, developing keyboarding speed and accuracy, and typing by touch. Fulfills the computer literacy graduation requirement. (A, CSU)
2 COMPUTER DOCUMENT PROCESSING II
3 units, 2 lecture hours, 3 lab hours,
(Formerly Business Information Processing 2)
PREREQUISITE: Business & Technology 1 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Producing and formatting specialized correspondence, letters, memos, reports, tables, and business forms using a current word processing program. Building typing speed and accuracy. Fulfills the computer literacy graduation requirement. (A, CSU)

5 WORKPLACE COMMUNICATION
3 units, 3 lecture hours, (See also Business Administration 5), (Formerly BSS 5 and Business General Office 5)
ADVISORY: Eligibility for English 1A recommended. Business & Technology 1 and 112 recommended.
Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. (A, CSU)

6 RECORDS MANAGEMENT
3 units, 3 lecture hours, 1 lab hour,
(Formerly Business Information Processing 10 and Business & Technology 10)
ADVISORY: Business & Technology 106 or equivalent. Eligibility for English 1A recommended.
An introduction to filing methods and principles for all Business & Technology majors and employees in the business community. Internationally applied rules of records management for manual and computerized systems used to create and maintain filing systems. Mastery of alphabetic, geographic, numeric, and subject filing. (A, CSU)

9 COMPUTER APPLICATIONS I
4 units, 3 lecture hours, 3 lab hours,
(Formerly Business Information Processing 9)
ADVISORY: Business & Technology 1 or equivalent. Eligibility for English 1A and Mathematics 201 recommended.
Hands-on learning which covers: an introduction to computers, their use, and the development of general computer skills with integrated software for office applications. Content includes word processing, spreadsheets, graphics, database, and electronic communication, using Microsoft Office. Fulfills the computer literacy graduation requirement. (A, CSU)

10 COMPUTER APPLICATIONS II
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Business & Technology 9 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Advanced computer application skills for preparing and enhancing documents, spreadsheets, databases, and presentations for professional use. Typically the most current version of Microsoft Office is taught. Fulfills the computer literacy graduation requirement. (A, CSU)

11 TODAY’S OFFICE
3 units, 3 lecture hours, 1 lab hour,
(Formerly Business General Office 18)
ADVISORY: Eligibility for English 1A recommended. Business & Technology 106 or 1 or equivalent recommended.
General duties of a receptionist including telephone techniques, telecommunications, handling mail, scheduling appointments, and making travel arrangements both manually and via the internet. Perform internet research on related topics. (A, CSU)

13 APPLIED BUSINESS CORRESPONDENCE
2 units, 2 lecture hours, (Formerly Business Information Processing 62)
PREREQUISITE: Business & Technology 112. ADVISORY: Eligibility for English 1A recommended.
Constructing effective business letters, memos, and reports that are accurate, complete, and well organized. Identifying and correcting problems in business correspondence and then rewriting to improve meaning, tone, and completeness. (A, CSU)

18 SPREADSHEET FUNDAMENTALS
2 units, 4 lecture hours, 1 lab hour, (9 weeks), (See also Computer Information Technology 23), (Formerly Business Information Processing 18)
ADVISORY: A working knowledge of basic arithmetic is recommended. Eligibility for English 1A recommended.
Creating and formatting a worksheet, using formulas and functions, and creating graphs; integrating spreadsheets with other programs and the World Wide Web; and creating macros. Cross-listed with CIT-23. (A, CSU)
19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units, (Formerly Secretarial Science 19 and Business General Office 19)
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to business & technology. Collaborative learning objectives established specific to business & technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

23 JOB SEARCH AND WORKPLACE SKILLS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Development of job-seeking and working relations tools and skills for students preparing to enter the workforce. Create marketable resumes and job search/interview strategies. Develop working relations competencies for greater on-the-job productivity and career success. Examination of human behavior, stress management, financial literacy, social and business relationships, goal setting, customer service, business communications, etiquette, leadership, teamwork, and conflict management. (A, CSU)

24 BEGINNING EXCEL
1 unit, 1 lecture hour, 1 lab hour, (See also Computer Information Technology 31), (Formerly Business Information Processing 24)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. (A, CSU)

25 MICROSOFT OFFICE
3 units, 3 lecture hours, 1 lab hour, (See also Computer Information Technology 20), (Formerly Business Information Processing 25)
PREREQUISITE: Computer Information Technology 15.
The major software components of the Microsoft Office suite: Word, Excel, Access, and PowerPoint. Working within the Windows graphical user interface, creating applications and sharing data files to develop solutions that use more than one component of the suite. Cross-listed with CIT-20. (A, CSU)

26 DATABASE FUNDAMENTALS
2 units, 4 lecture hours, 1 lab hour, (9 weeks), (See also Computer Information Technology 26), (Formerly Business Information Processing 26)
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.
Creating database files, entering data, modifying database file structure, designing queries, reports and forms. Cross-listed with CIT-26. (A, CSU)

28 MICROSOFT WORD I
1.5 units, 1.5 lecture hours, 1 lab hour, (Formerly Business Information Processing 28)
ADVISORY: Business & Technology 106 or equivalent recommended. Eligibility for English 1A recommended.
Basic features of Microsoft Word. Designed to equip students with the skills to prepare personal correspondence and reports. Fulfills the computer literacy graduation requirement. (A, CSU)

29 MICROSOFT WORD II
1.5 units, 1.5 lecture hours, 1 lab hour, (Formerly Business Information Processing 29)
PREREQUISITE: Business & Technology 28 or Business & Technology 9 or equivalent recommended. ADVISORY: Eligibility for English 1A recommended.
Advanced features of Microsoft Word. Designed for office personnel using Microsoft Word on the job. Fulfills the computer literacy graduation requirement. (A, CSU)

32 21ST CENTURY WORKFORCE SKILLS
1.5 units, 1.5 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Project-based course designed to help students develop the ‘soft’ skills needed to succeed in today’s changing workplace. Course topics will include the changing global economy, the rise of entrepreneurial-ism, how to be a competitive job seeker, and the top ten soft skills which include adaptability, analysis/solution mindset, collaboration, communication, digital fluency, entrepreneurial mindset, empathy, resilience, self-awareness, and social/diversity awareness. Supplementary items may include career/personality assessments that require a fee. (A, CSU)
33 SOCIAL MEDIA AND EMERGING TECHNOLOGIES IN THE WORKPLACE
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Business & Technology 106. Eligibility for English 1A recommended.
Project-based course providing dynamic coverage of current information available on social networking and emerging technologies for today's workplace environments. Includes researching and applying the latest tools toward office and administrative problem solving. (A, CSU)

104 TEN-KEY CALCULATIONS
2 units, 2 lecture hours, 1 lab hour,
(Formerly Business General Office 8 and Business & Technology 4)
PREREQUISITE: None.
The operation of electronic desktop calculators and the application of these calculators to business-oriented problems. The development of employable ten-key touch skills. (A)

106 COMPUTER KEYBOARDING
1.5 units, 1 lecture hour, 1.5 lab hours,
(Formerly Business Information Processing 6 and Business & Technology 6)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Development of skills using the touch method to key letters, numbers, and figures on a computer keyboard. (A)

112 BUSINESS ENGLISH
3 units, 3 lecture hours, (Formerly Business Information Processing 59 and Business & Technology 12)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Gain the skills needed to create grammatically correct work while improving speaking and writing skills. Review rules of English grammar and apply new concepts for communicating effectively in business settings. (A)

115 REFRESHER MATH
3 units, 3 lecture hours, (Formerly Business General Office 53 and Business & Technology 15)
ADVISORY: Eligibility for English 125 and 126 recommended.
Mathematics 260A.
Review of math fundamentals involving fractions, decimals, percents, and measurements with application problems related to business and technology. Designed for students preparing for business occupations. (A)

116 SPELLING AND VOCABULARY BUILDING
2 units, 2 lecture hours, (Formerly BSS 61 and Business General Office 61 and Business & Technology 16)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Fundamentals of effective communication in a business setting with an emphasis on spelling, proofreading, and improving vocabulary. (A)

120 RESUME/INTERVIEW
1 unit, 1 lecture hour, (Formerly Business General Office 59 and 59A and Business & Technology 20)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Development of job-seeking skills for students preparing to enter the workforce. Creating marketable resumes and practicing steps for winning interviews. (A)

121 WORKING RELATIONSHIPS
1.5 units, 1.5 lecture hours, (Formerly Business General Office 59B and Business & Technology 21)
ADVISORY: Eligibility for English 1A recommended.
Development of human relations competencies in the world of work for greater on-the-job happiness, productivity, and career success. (A)

122 TYPING SKILLBUILDING
0.5 unit, 1.5 lab hours, (Pass/No Pass), (Formerly Business Information Processing 51A and Business & Technology 22)
PREREQUISITE: Business & Technology 1 or equivalent.
Techniques and practice for improving keyboard speed and accuracy in order to meet certificate requirements. (A)

123 TEN-KEY SKILLBUILDING
0.5 unit, 1.5 lab hours, (Pass/No Pass)
PREREQUISITE: None.
Techniques and practice for improving ten-key speed and accuracy in order to meet degree and certificate requirements. (A)
126 AUTOMATED BUSINESS RECORDS
1 unit, 1 lecture hour, 1 lab hour, (Formerly Business & Technology 206)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Develop knowledge of record keeping by transferring data from paper accounting forms into a database, entering accounting information (customers, vendors, suppliers, etc.), modifying file structures, designing queries to produce accounting reports, and printing reports, all using the database software. (A)

127 MICROSOFT OUTLOOK AND E-MAIL
1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Using the Microsoft Outlook computer program to manage e-mail, appointments, contacts, and tasks; and to make notes and journal entries. Create effective e-mail messages for professional settings. (A)

130 BEGINNING POWERPOINT
1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Using basic features of Microsoft PowerPoint computer program to create presentations including editing, adding effects and presenting a finished presentation. (A)

131 APPLIED ACCOUNTING
3.5 units, 3 lecture hours, 2 lab hours, (Formerly Business General Office 51 and Business & Technology 31)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Practical accounting for service and merchandising businesses involving classification of accounts, relationship of assets, liabilities, and owner's equity; posting, accounts receivable, accounts payable, financial reports, the accounting cycle, and payroll. (A)

132 CUSTOMER SERVICE IN THE ONE-PERSON OFFICE
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A.
Practical, project-based course to enhance one's ability to gain and retain both customers and quality employees. (A)

134 EXPLORATION OF CAREERS IN BUSINESS
1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Students will use career exploration tools and engage with local employers as they assess their interest in, and explore the many options for, a career in business. Emphasis will be on the planning and communication skills needed to analyze career options and prepare for today's job market. (A)

135 CAPSTONE – ONE-PERSON OFFICE
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Business & Technology 106. Eligibility for English 1A recommended.
A project-based capstone course designed to explore productivity freeware, open-source software, and web-based tools to prepare the entrepreneur to efficiently and effectively run the office side of business. (A)

140 LEGAL DOCUMENT PROCESSING
3 units, 2 lecture hours, 3 lab hours, (See also Paralegal 156), (Formerly BSS 57A and Business General Office 56 and Business & Technology 40)
ADVISORY: Business & Technology 1, or Business & Technology 28, or basic knowledge of a word processing program. Ability to type at least 25 gross words per minute is recommended. Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Producing and formatting business and legal correspondence and documents using a current word processing program. (A)

143 MEDICAL OFFICE VOCABULARY
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended.
Develop the ability to pronounce, spell, define, and use medical terms in a medical office. (A, CSU)

144 MEDICAL ADMINISTRATIVE ASSISTANT
2.5 units, 2 lecture hours, 2 lab hours, (Fall only), (Formerly BSS 58 and Business General Office 58 and Business & Technology 44)
ADVISORY: Ability to touch type 25 words per minute. Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended. Business & Technology 1 or equivalent.
Administrative procedures in a medical office/healthcare setting. Prepare documents, file charts, conduct basic office operations; consider legal, ethical and cultural issues when interacting with patients. (A)
147 MEDICAL MANAGEMENT SOFTWARE
2 units, 1 lecture hour, 3 lab hours,
(Formerly Business Information Processing 63 and Business & Technology 47)
ADVISORY: Business & Technology 1.
Introduction to medical office management software. Students will learn to enter patient information, insurance information, schedule appointments, and generate reports. (A)

148 MEDICAL INSURANCE & BILLING CONCEPTS
2.5 units, 2 lecture hours, 2 lab hours,
(Formerly BSS 64 and Business General Office 64 and Business & Technology 48)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended. Business & Technology 1 or equivalent.
Interpret health insurance plans, complete insurance claims forms used in a medical office, complete with coding. (A)

271 BUSINESS GRAMMAR FUNDAMENTALS
2 units, 2 lecture hours, (Formerly Business Information Processing 71 and Business & Technology 71)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Introduction to or review of basic areas of business English: basic sentence structure, punctuation, capitalization, expression of numbers, spelling; also vocabulary developing, proofreading, and editing.

306 COMPUTER KEYBOARDING
1 lecture hour, 1.5 lab hours
PREREQUISITE: None.
Development of skills using the touch method to key letters, numbers, and figures on a computer keyboard.

307 INTRODUCTION TO WORD PROCESSING
1 lecture hour, 1.5 lab hours, (Repeats = 5)
PREREQUISITE: None.
Introduction of word processing features in various software platforms. Designed to equip students with the skills to prepare basic personal correspondence.

332 CUSTOMER SERVICE IN THE ONE-PERSON OFFICE
2 lecture hours, 3 lab hours, (Repeats = 5)
PREREQUISITE: None.
Practical, project-based course to enhance one’s ability to gain and retain both customers and quality employees.

370A OFFICE ASSISTANT APPLICATIONS
5 lecture hours, 10 lab hours, (20 weeks), (300 total hours), (Repeats = 3), (Open Entry/Open Exit), (Formerly CTVTC 70, CTCTC 370 and Business & Technology 370)
COREQUISITE: Business & Technology 370B.
Develop and improve skills for those desiring office employment. Emphasis on records management, keyboarding, grammar, 10-key, MS Word, MS Excel, telephone techniques, and computer literacy. Must be taken concurrently with BT 370B.

370B OFFICE ASSISTANT APPLICATIONS
5 lecture hours, 10 lab hours, (20 weeks), (300 total hours), (Repeats = 3), (Open Entry/Open Exit)
COREQUISITE: Business & Technology 370A.
Develop and improve skills for those desiring office employment. Emphasis on human relations, career document preparation, resume and interview and professional appearance. Must be taken concurrently with BT 370A.

375A INTRODUCTION TO KEYBOARDING
12 lab hours, (6 weeks), (Repeats = 5), (Open Entry/Open Exit)
PREREQUISITE: None.
Development of skills using the touch method to key letters, numbers, and figures on a computer keyboard.

375B INTRODUCTION TO FILING
12 lab hours, (2.2 weeks), (Repeats = 5), (Open Entry/Open Exit)
PREREQUISITE: None.
An introduction to filing methods and principles. Utilize the 12 rules of filing which includes alphabetic, geographic, numeric, government, and subject filing.

375C BASIC OFFICE COMMUNICATIONS
3.4 lecture hours, 2 lab hours, (6.6 weeks), (Repeats = 5), (Open Entry/Open Exit)
PREREQUISITE: None.
Develop and improve effective communication skills. Emphasis on spelling, proofreading, improving vocabulary, and telephone/e-mail etiquette.
375D MATH REVIEW AND TEN-KEY CALCULATOR
12 lab hours, (5 weeks), (Repeats = 5), (Open Entry/Open Exit)
PREREQUISITE: None.
Develop and improve skills with emphasis on the 10-key calculator and math review.

375E JOB SEARCH DOCUMENTS
0.83 lecture hours, 2.5 lab hours, (Repeats = 5), (Open Entry/Open Exit)
PREREQUISITE: None.
Create essential employment documents such as a resume, cover letter, and employment application.

377 GETTING STARTED WITH COMPUTERS AND WORKPLACE TECHNOLOGY
5 lecture hours, 5 lab hours, (3 weeks), (30 total hours), (Pass/No Pass)
PREREQUISITE: None.
Gain basic technology literacy required for the workplace as well as for success in introductory technology courses. Skills include: launching a computer and navigating to applications, keyboarding, emailing, and creating basic documents.

CARPENTRY
SEE CONSTRUCTION

CHEMISTRY (CHEM)

1A GENERAL CHEMISTRY
5 units, 3 lecture hours, 6 lab hours
PREREQUISITE: High school chemistry with laboratory component, Chemistry 101P, or Chemistry 3A or equivalent, and Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Development of atomic theory; atoms, isotopes, molecules, and ions; compounds; classification of matter; formulas and equations; stoichiometry; introduction to aqueous reactions: precipitation, acids and bases, and gas forming and redox reactions; gas laws; kinetic molecular theory of gases; thermochemistry; modern atomic theory; structure; bonding; inorganic nomenclature, kinetic molecular, gas laws, solutions, acid-base theories, oxidation-reduction, equilibrium, nuclear chemistry, and qualitative and quantitative theories and techniques. (C-ID CHEM 110 and CHEM 120S = CHEM 1A + CHEM 1B) (A, CSU-GE, UC, I)

1B GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS
5 units, 3 lecture hours, 6 lab hours
PREREQUISITE: Chemistry 1A. ADVISORY: Eligibility for English 1A recommended.
Acid-base theory; chemical kinetics; equilibrium (acid-base, hydrolysis, and solubility); chemical thermodynamics and electrochemistry; selected topics in nuclear chemistry, coordination chemistry, and/or chemistry of selected groups; inorganic qualitative and quantitative analysis. (C-ID CHEM 120S = CHEM 1A + CHEM 1B) (A, CSU-GE, UC, I)

3A INTRODUCTORY GENERAL CHEMISTRY
4 units, 3 lecture hours, 3 lab hours, (Replaces Chemistry 2A-2B)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Chemistry for applied science and non-science majors. The scientific method; chemical computations; composition of matter, energy, and physical and chemical changes; fundamental laws and principles; atomic and molecular theory; structure; bonding; inorganic nomenclature, kinetics, gas laws, solutions, acid-base theories, oxidation-reduction, equilibrium, nuclear chemistry, and qualitative and quantitative theories and techniques. (C-ID CHEM 101) (A, CSU-GE, UC, I)

3B INTRODUCTORY ORGANIC & BIOLOGICAL CHEMISTRY
4 units, 3 lecture hours, 3 lab hours, (Replaces Chemistry 3)
PREREQUISITE: Chemistry 3A. ADVISORY: Eligibility for English 1A recommended.

8A ELEMENTARY ORGANIC CHEMISTRY
3 units, 3 lecture hours, (Formerly Chemistry 8)
PREREQUISITE: Chemistry 1A or 3A. ADVISORY: Eligibility for English 1A recommended.
Properties and reactions of aliphatic and aromatic compounds, theories of structure, and reaction mechanisms. For biology majors and students in prehealth sciences, environmental sciences, and programs that do not require a full-year sequence in organic chemistry. Recommended for students requiring a one-semester organic chemistry course. (A, CSU-GE, UC, I)
18L ELEMENTARY ORGANIC CHEMISTRY LAB
2 units, 6 lab hours
PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 28A or Chemistry 8A. ADVISORY: Eligibility for English 1A recommended.
The course will focus on techniques appropriate to an industrial setting. Experiments will cover simple organic reactions and techniques used to prepare and process samples. Topics include preparation of solutions, solution properties, filtration, extraction, distillation, determination of physical properties, recrystallization, chromatography, and spectroscopy. (A, CSU, UC)

20 PRACTICAL QUANTITATIVE ANALYSIS
5 units, 2 lecture hours, 9 lab hours
PREREQUISITE: Chemistry 1B. ADVISORY: Eligibility for English 1A recommended.
The theory and practice of gravimetric and volumetric analysis, electrochemistry and instrumental methods. The analysis of unknown samples by both classical and instrumental techniques with emphasis on practical applications used in real lab settings. (A, CSU, UC)

28A ORGANIC CHEMISTRY I
3 units, 3 lecture hours, (Formerly Chemistry 28)
PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 29A. ADVISORY: Eligibility for English 1A recommended.

28B ORGANIC CHEMISTRY II
3 units, 3 lecture hours
PREREQUISITE: Chemistry 28A. COREQUISITE: Chemistry 29B. ADVISORY: Eligibility for English 1A recommended.

29A ORGANIC CHEMISTRY LABORATORY I
2 units, 6 lab hours
PREREQUISITE: Chemistry 1B. COREQUISITE: Chemistry 28A. ADVISORY: Eligibility for 1A recommended.

29B ORGANIC CHEMISTRY LABORATORY II
2 units, 6 lab hours
PREREQUISITE: Chemistry 29A. COREQUISITE: Chemistry 28B. ADVISORY: Eligibility for English 1A recommended.

100I CHEMICAL LABORATORY INTERNSHIP
2-6 units, 6-18 lab hours
COREQUISITE: Chemistry 18L. ADVISORY: Eligibility for English 1A recommended.
Supervised experience or employment in an approved chemical laboratory. (A)

101P GENERAL CHEMISTRY PREPARATION
3 units, 2 lecture hours, 2 lab hours
PREREQUISITE: Mathematics 201. ADVISORY: Eligibility for English 1A recommended.
Introductory chemistry for students who plan to major in a scientific field. Appropriate for students desiring to prepare themselves for CHEM 1A. Emphasizes chemical nomenclature and techniques of chemical problem solving. Topics covered include: dimensional analysis; conversions between measuring units; temperature; mass; mole and volume calculations; density; chemical equations; and solutions. Students must demonstrate a minimum of 80% competency in dimensional analysis, nomenclature, and mole calculations, on department approved proficiency quizzes, in order to pass the course. (A)
CHICANO-LATINO STUDIES (CLS)
FORMERLY CULTURAL STUDIES, LARAZA STUDIES

11 INTRODUCTION TO CHICANO-LATINO STUDIES
3 units, 3 lecture hours, (Formerly Cultural Studies 11)
ADVISORY: Eligibility for English 1A recommended.
The Chicano-Mexican American community, culture, and heritage in American society. An interdisciplinary approach to the study of society and culture, social and cultural change, and social and cultural conflict. Examines the roots and dynamics of Mexican and Mexican American cultures, from the Indigenous civilizations of Mesoamerica to the present. Also includes an introduction to the broader Latino population in the U.S. (A, CSU-GE, UC, I)

12 MEXICAN AMERICAN HISTORY
3 units, 3 lecture hours, (Formerly Cultural Studies 12)
ADVISORY: Eligibility for English 1A recommended.
A survey of Mexican American history from the indigenous civilizations of Mesoamerica to the present, with a focus on the history of Mexicans in the United States, and the historical reasons for migration. U.S.-Mexico relations and the history and heritage of the Chicana/Chicano community in the Southwestern U.S. are explored in depth. (A, CSU-GE, UC, I)

13 POLITICS AND THE CHICANO-LATINO COMMUNITY
3 units, 3 lecture hours, (Formerly Cultural Studies 13)
ADVISORY: Eligibility for English 1A recommended.
Chicano-Latino political issues, interaction with governmental and political structures, legislation, political parties, pressure groups, political socialization, and political change. The Chicano Movement. Chicano-Latino political organizations. (A, CSU, UC)

14 SOCIOLOGY OF THE MEXICAN AMERICAN COMMUNITY
3 units, 3 lecture hours, (See also Sociology 14), (Formerly Cultural Studies 14)
ADVISORY: Eligibility for English 1A recommended.
Sociological examination of the Chicano and Latino in American society: family, religion, education, social class, gender, and political and social institutions. Emphasis on social problems, social issues, and social change. (A, CSU, UC)

17A BEGINNING MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 17), (Formerly Cultural Studies and Chicano-Latino Studies 17)
ADVISORY: Eligibility for English 1A recommended.
History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the beginning level. (A, CSU-GE, UC)

17B BEGINNING INTERMEDIATE MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 17B)
PREREQUISITE: Chicano-Latino Studies 17A. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.
History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the pre-intermediate level. (A, CSU, UC)

18 LATIN JAZZ ENSEMBLE
2 units, 1 lecture hour, 3 lab hours, (See also Music 48), (Formerly Cultural Studies 18)
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1A recommended.
Study and performance of Latin jazz and Afro Cuban music. Students will develop an awareness and appreciation of the music of Latin America and Cuba through artistic and cultural creation. Participation in concerts and jazz festivals required. (A, CSU, UC)

20 CHICANO ART
3 units, 3 lecture hours, (Formerly Cultural Studies 20)
ADVISORY: Eligibility for English 1A recommended.
Mexican, Chicano, and Latino art from the historical to the contemporary. Contemporary art forms and their ancestral cultural base. Survey of Mexican, Chicano and Latino artistic expressions. (A, CSU-GE, UC, I)
21 CHICANO LITERATURE
3 units, 3 lecture hours, (Spring), (Formerly Cultural Studies 21)
ADVISORY: Eligibility for English 1A recommended.
Survey of Chicano-Latino classic and popular literature. Reading and critical analysis of novels, short stories, poetry, and plays. (C-ID ARTH 145) (A, CSU-GE, UC, I)

22 ART OF THE ANCIENT AMERICAS
3 units, 3 lecture hours, (See also Art 60)
ADVISORY: English 1A.
A historical survey of the art of the indigenous cultures of Mesoamerica (Mexico & Central America) and Andean South America prior to European contact. Featured cultures include Olmec, Maya, Toltec, Aztec, Paracas, Nazca, Moche, Wari & Incas. (A, CSU, UC)

24 LA CHICANA AND LATINA
3 units, 3 lecture hours, (Formerly Cultural Studies 24), (See also Women’s Studies 24)
ADVISORY: Eligibility for English 1A recommended.
A sociological analysis of Mexican American women in contemporary society. Special emphasis on her role in the family, church, education, economics, and politics. (A, CSU, UC)

27A INTERMEDIATE MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 27A)
PREREQUISITE: Chicano-Latino Studies 17B. Demonstrated experience and skills at the beginning level as assessed by instructor.
ADVISORY: Eligibility for English 1A recommended.
History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the intermediate level. (A, CSU, UC)

27B ADVANCED MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Dance 27B), (Formerly Chicano-Latino Studies 27)
PREREQUISITE: Chicano-Latino Studies/Dance 27A. ADVISORY: Eligibility for English 1A recommended.
History of the origin of Mexican dance, from the arrival of the Spaniards to the present. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)

28 ANCIENT MEXICO
3 units, 3 lecture hours, (See also Anthropology 28), (Formerly Cultural Studies 28)
ADVISORY: Eligibility for English 1A.
A survey of history, geography, socio-political, religious systems, and cultural achievements of Mesoamerican civilizations such as the Olmec, Zapotec, Teotihuacano, Mayan, Toltec, and Aztec/Mexican. (A, CSU, UC)

29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD
3 units, 3 lecture hours, (See also History 29), (Formerly Cultural Studies 29)
ADVISORY: English 1A.
A social, economic, and political survey of Mexican history from the colonial (1521) to the contemporary period. (A, CSU-GE, UC, I)

30 MIGRATION AND THE FAMILY: SOCIAL AND PSYCHOLOGICAL PERSPECTIVES
3 units, 3 lecture hours, (Formerly Cultural Studies 30)
ADVISORY: Eligibility for English 1A recommended.
Social and psychological perspectives on transnational migration and its impact on the family and mental health. Analysis of the dynamics of personality development and its relationship with the Mexican and Mexican American family. Emphasis on culture, socialization, resilience, and survival. (A, CSU-GE, UC, I)

33 COMMUNITY INVOLVEMENT: SERVICE LEARNING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Service learning in community, civic, or legal settings. Personal development, community and civic development, public policy development and analysis, and leadership theory. An introduction to Participatory Action Research. A working understanding of issues impacting the political, economic, and social fabric of the Latino community. Civic engagement related to coursework utilizing practical applications of course concepts. (A, CSU, UC)
1 PRINCIPLES AND PRACTICES OF TEACHING YOUNG CHILDREN
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An examination of the underlying historical context and theoretical perspectives of developmentally appropriate practice in early care and education. This course explores current best practices, professionalism and career pathways. (C-ID ECE 120) (A, CSU)

3 INTRODUCTION TO CURRICULUM
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Verification of freedom from tuberculosis.
Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.
Developmentally appropriate curriculum and environments for young children. Includes strategies for observation-based curriculum development and assessment for academic content areas, play, art and creativity. Includes a focus on children’s development of social-emotional, communication, self-help skills, and integration of content across the curriculum. The “To Be Arranged” hours may include observation of and participation in planning learning environments and curriculum. (C-ID ECE 130) (A, CSU)

5 PARENT EDUCATION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introduction to the skills needed for effective parenting; the developmental needs of children; effective communication skills; appropriate and effective use of discipline; family structure and function. (A, CSU)

6 HEALTH, SAFETY AND NUTRITION IN EARLY CHILDHOOD EDUCATION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. Prevention, detection, and management of communicable disease; medical issues associated with disabilities and chronic illness; physical health; mental health and safety for both children and adults; collaboration with families and health professionals. Integration of concepts into planning and program development for children ages 0 to 5. (C-ID ECE 220) (A, CSU)

9 MUSIC, MOVEMENT, AND DRAMA FOR YOUNG CHILDREN
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Basic skills, methods and theory in music, movement and drama for the young child. Emphasis on integrating music, movement and drama into the early childhood curriculum and developing a repertoire of music, movement and drama materials. (A, CSU)

10 SCIENCE AND MATH FOR YOUNG CHILDREN
3 units, 3 lecture hours, (Formerly Child Development 27)
ADVISORY: Eligibility for English 1A recommended.
Basic skills, methods and theory in science and math for the young child. Emphasis on integrating science and math into the early childhood curriculum and developing resource materials for these curriculum areas. (A, CSU)

11 THE YOUNG CHILD WITH SPECIAL NEEDS
3 units, 3 lecture hours
PREREQUISITE: Child Development 39. ADVISORY: Eligibility for English 1A recommended.
An introduction to the variations in development of children with special needs ages birth through eight and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process. (A, CSU)

12 CHILD ABUSE
3 units, 3 lecture hours, (See also Psychology 12)
ADVISORY: Eligibility for English 1A recommended.

15 DIVERSITY AND CULTURE IN EARLY CHILDHOOD EDUCATION PROGRAMS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Examines the development of children’s social identities in diverse societies and the influences of stereotypes and bias, social and educational access, media and schooling. Includes personal reflection for teachers on issues related to providing culturally and linguistically appropriate anti-bias environments, strategies and interactions. (C-ID ECE 230) (A, CSU)
16 INTRODUCTION TO EARLY INTERVENTION
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Child Development 20, verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended. Child Development 11 and 17A.

The study of infants and toddlers with disabilities, atypical development or other special needs, both in the Early Intervention setting and in the Child Care setting. Explores strategies and interventions used in the field of Early Intervention. Current theories in Early Intervention, early relationships, family systems, grief processing and stressors. The “To Be Arranged” hours may include observation of practitioners and participation in assessments and early intervention strategies. (A, CSU)

17A INFANT AND TODDLER PRACTICUM
3 units, 2 lecture hours, 3 lab hours,
(Formerly Child Development 7 and 38)
PREREQUISITE: Child Development 1, 6, and 39. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Applies current theory and research to the care and education of infants and toddlers in group settings. Examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. The “To Be Arranged” hours may include observation of and participation in planning environments and facilitating infant toddler growth and development. (A, CSU)

17B ADVANCED INFANT AND TODDLER DEVELOPMENT
3 units, 3 lecture hours, (Formerly Child Development 7A)
PREREQUISITE: Child Development 17A. ADVISORY: Eligibility for English 1A recommended.

A study of infants and toddlers focusing on birth to age three including physical, cognitive, language, social, and emotional growth and development. Includes an overview of pre-conception, conception, prenatal development and birth. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Emphasizes the role of family and relationships in development. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student’s major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to child development. Collaborative learning objectives established specific to child development. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

20 OBSERVATION AND ASSESSMENT
3 units, 3 lecture hours
PREREQUISITE: Child Development 1, 3, and 39. ADVISORY: Eligibility for English 1A recommended.

Appropriate use of assessment, observation, and recording strategies; documentation of development and learning; partnerships with families and professionals; use of rating systems, portfolios, and multiple assessment tools. (C-ID ECE 200) (A, CSU)

30 CHILD, FAMILY, AND COMMUNITY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.

An examination of the developing child in a societal context focusing on the interrelationship of family, school and community and emphasizes historical and socio-cultural factors. The process of socialization and identity development will be highlighted.(C-ID CDEV 110) (A, CSU-GE, UC, I)

37A EARLY CHILDHOOD PRACTICUM
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Child Development 1 and Child Development 3 and Child Development 39/Psychology 39. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Curriculum design, implementation and evaluation of developmentally appropriate experiences that promote positive development and learning for all young children, in a supervised lab school setting or in early childhood programs with mentor teachers. Emphasis on child centered play-oriented approaches to teaching, learning and assessment. Classroom experiences will support connections between theory and practice, develop professional behaviors and build comprehensive understanding of children and families. The “To Be Arranged” hours may include observation of and participation in planning environments and activities to facilitate preschool children’s growth and development. (C-ID ECE 210) (A, CSU)
37B ADVANCED PRACTICUM IN EARLY CHILDHOOD EDUCATION
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Child Development 37A. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles. ADVISORY: Eligibility for English 1A recommended.

Supervised experience as a teacher in an early childhood education program: developing environments for learning, child observation and assessment, documentation of children's work, behavior guidance, group management, collaborative teaching, building relationships with families, and effective preparation and implementation of curriculum. The “To Be Arranged” hours may include observation of and participation in planning environments and activities to facilitate the growth and development of preschool children in early care and education settings. (A, CSU)

38 LIFESPAN DEVELOPMENT
3 units, 3 lecture hours, (See also Psychology 38)
ADVISORY: Eligibility for English 1A recommended.
Basic theories, research concepts, and principles of typical and atypical physical, cognitive and psychosocial development at each major stage of life from conception to death. All major topics of human development (e.g. human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying) presented in an integrated manner. (C-ID PSY 180) (A, CSU-GE, UC, I)

39 CHILD GROWTH AND DEVELOPMENT
3 units, 3 lecture hours, 1 lab hour, (See also Psychology 39)
ADVISORY: Eligibility for English 1A recommended. Verification of freedom from tuberculosis. Verification of immunization against influenza, pertussis and measles.
Basic theories, research, concepts, and principles of physical, cognitive/language, and psychosocial development at each major stage in life from conception through adolescence. Emphasis on environmental and genetic influences on typical and atypical development. The “To Be Arranged” hours may include observation and documentation of children at various stages of development. (C-ID CDEV 100) (A, CSU-GE, UC, I)

40A ADMINISTRATION I: PROGRAMS IN EARLY CHILDHOOD EDUCATION
3 units, 3 lecture hours, (Formerly Child Development 36A)
PREREQUISITE: Child Development 30 and 37A or Child Development 30 and 17A. ADVISORY: Eligibility for English 1A recommended.
Introduction to the administration of early childhood programs. Covers program types, budget, management, regulations, laws, development and implementation of policies and procedures. Examines administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program. (A, CSU)

40B ADMINISTRATION II: PERSONNEL AND LEADERSHIP IN EARLY CHILDHOOD EDUCATION
3 units, 3 lecture hours, (Formerly Child Development 36B)
PREREQUISITE: Child Development 30 and 37A or Child Development 30 and 17A. ADVISORY: Eligibility for English 1A recommended.
Effective strategies for personnel management and leadership in early care and education settings. Includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. (A, CSU)

42 CHILD NUTRITION
3 units, 3 lecture hours, (See also Food and Nutrition 42)
ADVISORY: Food and Nutrition 40 and eligibility for English 1A recommended.

43 CHILDREN'S LITERATURE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Selection and presentation of literature for the child from infancy to eight years. Storytelling, emergent literacy and awareness regarding diverse perspectives. Emphasis on supporting the child’s emotional, social and cognitive growth through experience with books. (A, CSU)
45  ADULT SUPERVISION AND MENTORING IN EARLY CARE AND EDUCATION
3 units, 3 lecture hours
PREREQUISITE: Child Development 17A or 37A. Current employment in a supervisory capacity in an early care and education setting.
ADVISORY: Eligibility for English 1A recommended.
Methods and principles of mentoring and supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. This course satisfies the adult supervision requirement for the Master Teacher Permit issued by the California Commission on Teacher Credentialing. (A, CSU)

47  EMERGENT LITERACY
3 units, 3 lecture hours, (Formerly Child Development 47A)
ADVISORY: Eligibility for English 1A recommended.
Research-based principles and practices for providing children birth through age eight with a strong foundation in emergent language and literacy skills within a developmentally-appropriate approach. Topics include the teacher's role, preparation of the classroom environment, curriculum development and teaching strategies, including ways to support the child learning English as a second language. (A, CSU)

48  CHILDREN WITH CHALLENGING BEHAVIORS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Effective strategies for working with children with challenging behaviors in early childhood environments; guidelines for discussion, identification and intervention of impeding behaviors; emphasis on teacher's role in supporting children through emotional difficulties and sensory challenges; needs of children at risk, in trauma and/or deprivation. Specific disabilities or special needs which affect behavior will be studied. (A, CSU)

53  FAMILY CHILD CARE PROGRAMS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An introduction to managing a quality family child care home; meeting licensing requirements, developing policies for parents, business practices, recruiting children, and strategies to promote professionalism. Program planning including developmentally appropriate practices for children of mixed ages, guidance techniques, and designing an environment for children's learning. (A, CSU)

60  INTRODUCTION TO CHILD WELFARE
3 units, 3 lecture hours, (See also Human Services 60)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the child welfare system. Exploration of the goals of child welfare including safety, a permanent family and well-being of every child. Emphasis on the practice of preventing, remedying, or ameliorating child maltreatment. (A, CSU)

CHINESE
SEE FOREIGN LANGUAGES

CISCO
SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

COMMUNICATION (COMM)
FORMERLY SPEECH

1  INTRODUCTION TO PUBLIC SPEAKING
3 units, 3 lecture hours, (Formerly Speech 1)
ADVISORY: Eligibility for English 1A recommended.
Theories and techniques of public speaking from the perspective of the speaker and the audience. Emphasis on research, logical organization, composition and effective delivery of informative and persuasive speeches. Practice in clearly stating and developing ideas. (C-ID COMM 110) (A, CSU-GE, UC, I)

2  INTERPERSONAL COMMUNICATION
3 units, 3 lecture hours, (Formerly Speech 2)
ADVISORY: Eligibility for English 1A recommended.
Introduction to interaction processes in interpersonal communication settings. Emphasis on effective and appropriate uses of verbal and nonverbal messages in the initiation, development, maintenance, and termination of personal and professional relationships. (C-ID COMM 130) (A, CSU-GE, UC)

4  PERSUASION
3 units, 3 lecture hours, (Formerly Speech 4)
ADVISORY: Eligibility for English 1A recommended.
Theories and practice of influence, advocacy, and reasoning from the perspective of both persuader and audience. Practice preparing effective, ethical persuasive appeals. (C-ID COMM 190) (A, CSU-GE, UC, I)
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8 GROUP COMMUNICATION
3 units, 3 lecture hours, (Formerly Speech 8)
ADVISORY: Eligibility for English 1A recommended.
An introduction to group communication as a vehicle for solving problems, reaching decisions, and making recommendations on policy. Students will study and practice the theories, behaviors, and processes of group communication. (C-ID COMM 140) (A, CSU-GE, UC, I)

8H HONORS GROUP COMMUNICATION
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.
An introduction to group communication as a vehicle for solving problems, reaching decisions, and making recommendations on policy. Students will study and practice the theories, behaviors, and processes of group communication. Honors sections will also focus on a more in-depth analysis of group communication theory and its application. (A, CSU)

12 FUNDAMENTALS OF ORAL INTERPRETATION
3 units, 3 lecture hours, (See also Theatre Arts 12), (Formerly Speech 12)
ADVISORY: Eligibility for English 1A recommended.
An introduction to performance studies analysis, appreciation, and application of theories of interpretive performance of various forms of literature including poetry, prose, and drama. (A, CSU-GE, UC)

20 COMMUNITY INVOLVEMENT
2-3 units, 1 lecture hour, 3-6 lab hours, (Formerly Speech 20)
ADVISORY: Eligibility for English 1A recommended.
Theory and practice of community service in nonprofit agencies. Emphasis on the analysis, practice and application of communication theory, leadership, and citizenship through a community service experience. (A, CSU)

25 ARGUMENTATION
3 units, 3 lecture hours, (Formerly Speech 25)
ADVISORY: Eligibility for English 1A recommended.
Analysis, reasoning, advocacy, and criticism of ideas. Emphasis on derived conclusions based on valid evidence and sound inferences without using fallacies of thought and language. Demonstration of basic principles through a variety of oral presentations and written assignments. (C-ID COMM 120) (A, CSU-GE, UC, I)

26 INTERCOLLEGIATE FORENSICS LABORATORY
1-3 units: 1 unit, 1 lecture hour, 1 lab hour; 2 units, 1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours, (Repeats = 3), (Formerly Speech 26)
ADVISORY: Eligibility for English 1A recommended.
Competitive and practical experience in debate and public speaking. In addition to the class or activity hour each week on campus, students must either attend intercollegiate tournaments for a specified number of weekends or participate in on-campus intramural contests. (C-ID COMM 160B) (A, CSU)

COMPUTER AIDED DRAFTING AND DESIGN (CADD) SEE ALSO DRAFTING

14 2D CAD I
3 units, 2 lecture hours, 3 lab hours, (Formerly Drafting 42 and 32)
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic recommended.
Creating and modifying digital drawings for the architectural, engineering, mechanical, manufacturing and other related industries. (A, CSU)

16 3D SOLID MODELING I
3 units, 2 lecture hours, 3 lab hours, (Formerly Drafting 20 and Computer Aided Drafting and Design 26 and 34)
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic recommended.
CAD generated 2D sketches, 3D solid models, assemblies and detailed drawings for the mechanical and manufacturing industries. Design topic included. (A, CSU)

22 MECHANICAL DRAWING I
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Sheet metal, fasteners and welding drawings using solid modeling practices. Use of precision measuring tools and tolerances will also be covered. Industry Certified Exams. (A, CSU)

24 2D CAD II
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 14.
Advanced 2D CAD topics for the computer aided draftsperson in the disciplines of architecture, engineering, mechanical, manufacturing and other related industries. (A, CSU)

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26A 3D SOLID MODELING II
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Advanced drawings and features, design tables, configurations
and sub-assemblies using 3D solid modeling techniques for mechanical
and manufacturing industries. Industry Certified Exam. (A, CSU)

28 PRODUCT DEVELOPMENT I
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Create realistic rapid prototypes/models from digital solid models
using processes such as 3D printing, silicone molds, casting resins,
vacuum forming, laser cutting and engraving and the application of
finishes. Industry Certified Exam. (A, CSU)

32 REVERSE ENGINEERING I
3 units, 2 lecture hours, 3 lab hours,
(Formerly Drafting 22 and Computer Aided
Drafting and Design 24)
PREREQUISITE: Computer Aided Drafting and Design 16.
Reverse engineering practices using specialized software and
various scanners including laser. Traditional methods will also be
covered. (A, CSU)

36A 3D SOLID MODELING III
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16.
Create renderings and animations of solid models and assem­
blies. The application of advanced modeling features and techniques.
Create solid models using surface modeling techniques. Run simulations
on solid models to determine the factor of safety. (A, CSU)

42 MECHANICAL DRAWING III
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 28 and
36A.
Project design using various CAD systems. Portfolio creation
including presentation models. Industry Certified Exams. (A, CSU)

5 CNC OPERATION & MAINTENANCE FOR
MACHINIST
2.5 units, 1.5 lecture hours, 3 lab hours,
(Formerly Computer Aided Manufacturing 25)
ADVISORY: Eligibility for English 1A recommended.
Learn how to read part prints and use measurement tools for
first part inspection setup & operation CNC Mill & Lathe Machine, learn
the G&M Codes for tool programming, shop safety and preform basic
maintenance. (A, CSU)

10 CNC MILL PROGRAMMING & OPERATION I
4 units, 2 lecture hours, 6 lab hours,
(Formerly Drafting and Computer Aided
Drafting and Design 44)
ADVISORY: Eligibility for English 1A recommended.
The CAM 10 class is designed to teach entry-level Machinist to
design 3D parts in Mastercam and Fusion 360 CAD/CAM software. This
core class is first in a sequence for the CNC Machinist career. (A, CSU)

15 CNC PROGRAMMING FOR MACHINIST
2.5 units, 1.5 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 14 or 16,
or Computer Aided Manufacturing 10.
Designed for students who have CAD (Computer Aided Design)
experience and are interested in CAM (Computer Aided Manufacturing)
CAD/CAM. Students will use Mastercam & Fusion 360 tool programming
software packages for Computer Numerical Control part programming.
(A, CSU)

20 CNC MILL PROGRAMMING &
OPERATION II
4 units, 2 lecture hours, 6 lab hours
PREREQUISITE: Computer Aided Manufacturing 10.
The CAM 20 Class is an intermediate Digital Manufacturing
course that teaches students the skill of CNC Machine setup/Operation
& 3D Solid Geometry Design with Mastercam & Fusion 360 for Mill Tool
Programming. (A, CSU)

26 LATHE PROGRAMMING AND OPERATION II
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Manufacturing 10,
Mastercam & Fusion 360 is the 3D Solid Designing and Tool
Programming software for the Computer Numerical Control Operation
Lathe course. Learn how to create production parts for part inspection.
(A, CSU)
31 MULTI-AXIS MILLING & PROGRAMMING
3 units, 2 lecture hours, 3 lab hours
Multi-Axis Milling & Programming class is designed to teach advanced CAD/CAM tools for Multi-Axis Tool machining and Part Fixtures used in today's job shops. (A, CSU)

COMPUTER INFORMATION TECHNOLOGY (CIT)
FORMERLY INFORMATION SYSTEMS

12 COMPUTER LITERACY
3 units, 3 lecture hours, 1 lab hour,
(Formerly Computer Information Systems 56 and Information Systems 12)
ADVISORY: Eligibility for English 1A recommended.
Basic introduction to computers and their usage in business. Basic principles of hardware and software; networking, e-commerce, shopping for a personal computer; social issues, such as ethics and security, associated with the role of computers in the world today; and an introduction to word processing, spreadsheets, database, and internet principles and usage. Fulfills the computer literacy graduation requirement. (A, CSU, UC)

15 COMPUTER CONCEPTS
3 units, 3 lecture hours, 1 lab hour,
(Formerly Computer Information Systems 15 and Information Systems 15)
ADVISORY: Eligibility for English 1A is recommended. A working knowledge of basic arithmetic is recommended.
Introduction to computers and their use. Topics include basic principles of hardware and software, application programs, systems software, telecommunications, networks, program design, the Internet, and the World Wide Web. Students will work with Windows and the Internet; word processing, spreadsheet, and database programs; and a programming language. Fulfills the computer literacy graduation requirement. (C-ID ITIS 120) (A, CSU, UC)

17 WINDOWS
2 units, 3 lecture hours, 1 lab hour, (9 weeks),
(Formerly Computer Information Systems 14 and Information Systems 14)
ADVISORY: Eligibility for English 1A recommended.
Basic introduction to Microsoft Windows. Introductory hands-on operations for students who want to learn how to manage files, run applications, customize desktops, browse the internet, use email, and work with pictures and music. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units, (Formerly Information Systems 19)
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to computer information technology. Collaborative learning objectives established specific to computer information technology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

20 MICROSOFT OFFICE
3 units, 3 lecture hours, 1 lab hour, (See also Business & Technology 25), (Formerly Information Systems 25)
PREREQUISITE: Computer Information Technology 15.
The major software components of the Microsoft Office suite: Word, Excel, Access, and PowerPoint. Working within the Windows graphical user interface, creating applications and sharing data files to develop solutions that use more than one component of the suite. (A, CSU)

23 SPREADSHEET FUNDAMENTALS
2 units, 4 lecture hours, 1 lab hour, (9 weeks), (See also Business & Technology 18), (Formerly Information Systems 5 and 18)
ADVISORY: Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.
Creating and formatting a worksheet, using formulas and functions, and creating graphs; integrating spreadsheets with other programs and the World Wide Web; and creating macros. (A, CSU)

24 ADVANCED SPREADSHEETS
2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 20)
PREREQUISITE: Computer Information Technology 23 or Business & Technology 18.
Advanced capabilities of spreadsheets. Solving complex problems using spreadsheets, creating and using macros, creating data tables, working with multiple worksheets and workbooks, and using Visual BASIC to enhance a spreadsheet. (A, CSU)
26 DATABASE FUNDAMENTALS
2 units, 4 lecture hours, 1 lab hour, (9 weeks), (See also Business & Technology 26), (Formerly Information Systems 6 and 2 6)
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.
Creating database files, entering data, modifying database file structure, designing queries, reports and forms. (A, CSU)

28 CLIENT/SERVER DATABASES
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Fundamentals of relational database systems. How to design, program and administer a client / server database. (A, CSU)

31 BEGINNING EXCEL
1 unit, 1 lecture hour, 1 lab hour, (See also Business & Technology 24), (Formerly Information Systems 24 and 74)
ADVISORY: Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.
Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. (A, CSU)

40 COMPUTER OPERATING SYSTEMS
4 units, 3.5 lecture hours, 2 lab hours, (Formerly Information Systems 22)
PREREQUISITE: Computer Information Technology 12 or 15.
Principles of computer operating systems. A survey and comparison of the graphical user interface along with the command line interface using various operating systems such as Microsoft Windows and Linux, etc. (A, CSU, UC)

45 DATA COMMUNICATIONS
3 units, 3 lecture hours, 1 lab hour, (Formerly Computer Information Systems and Information Systems 17)
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. It uses the OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. (A, CSU)

48A IT+ FUNDAMENTALS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 15. Eligibility for English 1A recommended.
Skills for personal computer software applications and hardware support including features and functions of common operating systems, network connectivity using security and web browsing best practices. (A, CSU)

48B A+ AND SECURITY PRINCIPLES
3 units, 3 lecture hours, 1 lab hour,
(Formerly Information Systems 238, Computer Information Technology 238, and Computer Information Technology 48)
ADVISORY: Computer Information Technology 15. Eligibility for English 1A recommended.
Skills for personal computer software and hardware support; server software and hardware support: installation, configuration, diagnosing and troubleshooting system software, basic networking, memory management, server principles and configuration and network security. Prepares students to take industry certification exams. Basic understanding information security in a business environment. Introduces network security, legal, ethical, and professional security issues, risk management, access control, and intrusion detection. Students learn the basics of information security. (A, CSU)

50 FUNDAMENTALS OF NETWORKING
4 units, 4 lecture hours, 1 lab hour, (Formerly Information Systems 28, 30 and 30A.)
PREREQUISITE: Computer Information Technology 45.
Implementing and supporting a network infrastructure. For product support professionals who will be responsible for installing, configuring and supporting a network infrastructure. Fundamentals of Windows and UNIX/Linux servers. (A, CSU)

54A NETWORK SECURITY
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Computer Information Technology 45 and Electrical Systems Technology 62.
An introduction to network security principles including firewall technologies, AAA, intrusion prevention, securing LANs, implementing VPNs, and managing secure networks. (A, CSU)
54B  CYBERSECURITY OPERATIONS
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Computer Information Technology 45 and 58C.
An introduction to cybersecurity operations including detecting
cybersecurity breaches and effectively responding to security incidents.
This class is meant to provide a background for students desiring entry
level work as a cybersecurity analyst within security operations centers.
(A, CSU)

55  DATABASE SECURITY
3 units, 3 lecture hours, 1 lab hour,
(Formerly Information Systems 30F)
PREREQUISITE: Computer Information Technology 45 and 50.
Design a database security framework for small, medium, and
enterprise networks by using Microsoft Windows technologies. The
fundamentals include Microsoft SQL Server, MySQL, and Oracle. (A,
CSU)

57  WIRELESS NETWORK SECURITY
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 40, 45, and 50 recommended.
Basic understanding of wireless networking. Plan, design, and
configure wireless networks and equipment. Basic security for wireless
networks. Prepare for Wireless Network Security certification exam. (A,
CSU)

58B  COMPUTER FORENSICS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISO­
RY: Computer Information Technology 40, 45, and 50 recommended.
This course introduces the methods used to conduct a computer
forensics investigation. Topics include an overview of computer forensics
as a profession, the computer investigation process, operating systems’
boot processes and disk structures, data acquisition and analysis, ethics,
and a review of standard computer forensic tools. (A, CSU)

58C  SECURITY+ FUNDAMENTALS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISO­
RY: Computer Information Technology 40, 45, and 50 recommended.
Provides a comprehensive overview of network security. Covers
a full range of security concepts and techniques used in the business
environment. Prepares students to become CompTIA Security+ certi­
fied. Covers authentication methods and common network attacks with
strategies to protect a business against these attacks. Explores various
network devices and media, and the proper use of perimeter topologies,
extranets, and intranets to establish network security. Introduces basic
cryptography and basic operational and organizational security measures.
(A, CSU)

58D  NETWORK DEFENSE AND
COUNTERMEASURES
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISO­
RY: Computer Information Technology 40, 45, and 50 recommended.
Examines the practice and techniques of intrusion detection
to deter network attacks against business information technologies. Provides a comprehensive overview of intrusion detection design, and
implementation, virtual private networks, packet filters, and network
traffic signatures. Prepares students to take the network defense and
countermeasures exams like CompTIA Security+ exam and the E-C Council Certified Ethical Hacker exam. (A, CSU)

58E  PENETRATION TESTING
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISO­
RY: Computer Information Technology 40, 45, and 50 recommended.
Fundamental overview of network security penetration testing,
cryptography, vulnerability testing, password cracking, general hacking,
authentication methods, packet filtering, proxy servers, and encryption
strategies to protect business information systems. Prepares students
for industry standard security certifications. (A, CSU)

58F  ETHICAL HACKING
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISO­
RY: Computer Information Technology 40, 45, and 50 recommended.
Basic understanding of the ethics involved in testing systems and
networks using hacking tools to judge the level of vulnerability. Penetration testing methodologies, security certification programs, laws
governing hacking, tools such as port scanners and network sniffers as
well as spyware, adware, worms, and viruses. (A, CSU)

60  BEGINNING VISUAL BASIC
4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 35 and 47)
PREREQUISITE: Computer Information Technology 15.
Introduction to programming in Visual Basic. Development of
applications using standard Windows elements such as command but­
tons, and check, option and list boxes. Emphasis on structured program
design, including debugging, testing, and documentation. (A, CSU, UC)

63  BEGINNING JAVA PROGRAMMING
4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 33 and 39)
PREREQUISITE: Computer Information Technology 15. Eligibility for
English 1A recommended.
Developing Java Applets and applications using the Java
programming language. Emphasis on object-oriented programming,
control structures, methods, arrays, strings, inheritance, and graphics.
(A, CSU, UC)
65 ANDROID PROGRAMMING APPLICATIONS
4 units, 4 lecture hours, 1 lab hour
COREQUISITE: Computer Information Technology 63.
An introduction to software development for the Android platform.
Create Android applications that can run on smart phones, tablets and other devices. Explore user interface (UI) considerations for Android devices. Use Java and XML to write object-oriented programs emphasizing the use of classes, abstraction and inheritance, controller and delegate patterns, and core objects used in the Android software development kit. (A, CSU)

66 BEGINNING C++ PROGRAMMING
4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 36)
ADVISORY: Computer Information Technology 15. Eligibility for English 1A recommended.
Software development using the C++ programming language.
Emphasis on object-oriented design, computations, strings, pointers, functions, classes, and objects. (A, CSU, UC)

69 IOS PROGRAMMING APPLICATIONS
4 units, 4 lecture hours, 1 lab hour
COREQUISITE: Computer Information Technology 70.
An introduction to software development for the iOS (Apple) platform. Create iOS applications that can run on the iPhone, iPod Touch or the iPad. Explore user interface (UI) considerations for Apple devices. Use Objective-C, Cocoa Framework and Xcode to write object-oriented programs emphasizing the use of classes, abstraction and inheritance, controller and delegate patterns, and core objects used in the iOS software development kit. (A, CSU)

70 BEGINNING SWIFT PROGRAMMING
4 units, 4 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
An introduction to programming using the Swift language.
Emphasis on fundamentals including computation, control structures, functions, classes, object-oriented design, inheritance, and algorithm performance. Preparation for software development on the macOS and iOS platforms. (A, CSU, UC)

80 INTERNET BASICS
2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 7 and 40)
PREREQUISITE: None.
Introduction to the Internet and the World Wide Web, including the use of e-mail, discussion boards, browser basics, FTP, searching the Web, History of the Internet, Internet ethics, e-commerce, and Netiquette. (A, CSU)

81 WORLD WIDE WEB RESEARCH
2 units, 4 lecture hours, 1 lab hour, (9 weeks), (Formerly Information Systems 8 and 41)
ADVISORY: Computer Information Technology 15.
Using the World Wide Web for research. Topics include browsers, search engines, Boolean logic, and URLs. Requires preparing and presenting reports from the research. (A, CSU)

82 INTRODUCTION TO WEB DEVELOPMENT
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Survey of contemporary web technologies in authoring, distributing, and browsing. Topics include: web servers, scripting, protocols, E-Commerce, information architecture, website traffic analysis, search engine optimization, and website usability. (A, CSU)

84 WEB DEVELOPMENT FRAMEWORKS
4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 93.
A survey of various web development frameworks to significantly simplify the web development process. Using frameworks to automate web development activities. (A, CSU)

85 HTML AND CSS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Design web pages for the Internet using a web page design language. (A, CSU)

90 BEGINNING GO LANGUAGE PROGRAMMING
4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 28)
PREREQUISITE: None.
An introduction to the Go programming language, which is an open-source modern language associated with developing fast, efficient, and scalable web applications. (A, CSU)

93 JAVASCRIPT
4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
Fundamentals of JavaScript to add interactivity to web pages and web sites on the Internet. Topics include writing functions, using data from forms, buttons, menus, and text boxes, and using if conditional statements and program loops to make web pages “smarter”. (A, CSU)
94 NODE.JS
4 units, 4 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 93. Eligibility for English 1A recommended.

95 INTRODUCTION TO PYTHON PROGRAMMING
4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.
Using Python programming language, involves activities such as analysis, understanding, solving problems using algorithms, correctness and resource requirements, coding of algorithm in proper syntax, testing, debugging, maintaining source code, documenting and implementation of the built system and its management. (A, CSU)

97 WEB DEVELOPMENT WITH THE GO PROGRAMMING LANGUAGE
4 units, 4 lecture hours, 1 lab hour
ADVISORY: Computer Information Technology 90.
Using the Go programming language to create web applications at scale in addition to creating web APIs, micro-services, and other distributed services. (A, CSU)

99 INTRODUCTION TO MACHINE LEARNING
4 units, 4 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 94.
A broad introduction to machine learning, datamining, and statistical pattern recognition. Neural models will be created to find patterns in large data sets using Tensorflow. (A, CSU)

161 MICROSOFT WINDOWS SKILL
1 unit, 0.5 lecture hour, 1.5 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: None.
Intended for students new to Microsoft Windows or with existing knowledge using an older version of Windows. Designed to improve current skills and learn additional features of Windows Explorer. (A)

202 INTRODUCTION TO ONLINE LEARNING
1 unit, 1 lecture hour, 3 lab hours, (9 weeks), (Pass/No Pass)
PREREQUISITE: None.
Learn the skills necessary to improve performance in classes online.

COMPUTER SCIENCE (CSCI)

1 INTRODUCTION TO PROGRAMMING CONCEPTS AND METHODOLOGIES
3 units, 2.5 lecture hours, 2 lab hours
PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.
Introduction to computer science with emphases on critical thinking skills and programming concepts. Topics include deductive reasoning, computer hardware and software, programming concepts and methodology. The course is designed to prepare students with little or no programming experience for CSCI 40. The course satisfies the Computer Familiarity requirement. (C-ID COMP 112) (A, CSU, UC)

26 DISCRETE MATHEMATICS FOR COMPUTER SCIENCE
4 units, 3.5 lecture hours, 2 lab hours
PREREQUISITE: Computer Science 40 and Mathematics 5A.
ADVISORY: Eligibility for English 1A recommended.
Elements of discrete mathematics which have applications to computer science. Topics include sets, propositional and predicate logic, relations and functions, mathematical induction, graphs, and trees. (C-ID COMP 152) (A, CSU-GE, UC, I)

40 PROGRAMMING CONCEPTS AND METHODOLOGY I
4 units, 3.5 lecture hours, 2 lab hours,
(Formerly Mathematics 30A and Computer Science 30A)
PREREQUISITE: Mathematics 103 or equivalent. COREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 1A, and Computer Science 1 recommended.
Introduction to problem solving, algorithm development, procedural and data abstraction using the C++ language; program design, coding, debugging, testing, and documentation. (A, CSU, UC)

41 PROGRAMMING CONCEPTS & METHODOLOGY II
4 units, 3.5 lecture hours, 2 lab hours,
(Formerly Mathematics 30B and Computer Science 30B)
PREREQUISITE: Computer Science 40 and Mathematics 4A, or equivalent. ADVISORY: Eligibility for English 1A recommended.
Programming methodology, program correctness, and review of data types; data structures; linear and nonlinear structures; lists, stacks, queues, trees, and files; implementation of data structures; recursion, searching, and sorting. C++ language is used. (A, CSU, UC)
45 COMPUTER ARCHITECTURE AND ORGANIZATION
4 units, 3.5 lecture hours, 2 lab hours
PREREQUISITE: Computer Science 40. ADVISORY: Eligibility for English 1A recommended.
Introduction to functional organization of digital computers and low level programming; internal representation of data, binary arithmetic, machine instructions, addressing modes, subroutine linkage, macros and interrupts, PC Assembly language programming. (C-ID COMP 142) (A, CSU, UC)

CONSTRUCTION – CARPENTRY (CONS)

14 BUILDING INSPECTION
3 units, 3 lecture hours, (Formerly Building Code and Safety Administration 14)
ADVISORY: Eligibility for English 1A recommended.
Familiarization with inspections of residential one and two-family dwellings and type V construction, in preparation for I.C.C. Building Inspector certification. (A, CSU)

18 CALIFORNIA DISABLE ACCESS REGULATIONS
3 units, 3 lecture hours, (Formerly Building Code and Safety Administration 18)
ADVISORY: Eligibility for English 1A recommended.

50 BASIC RESIDENTIAL CONSTRUCTION
4 units, 3 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A and Applied Technology 130 or Mathematics 201 recommended.
General introductory and basic skills in residential construction. Emphasis on hand and power tool use. Foundations, framing, roofing, interior and exterior finish techniques and materials. (A, CSU)

50A BASIC RESIDENTIAL CONSTRUCTION
3 units, 2 lecture hours, 3 lab hours,
(Formerly Construction 50)
ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
This course provides students with general basic residential construction knowledge and skills including guided hands on practice using hand and power tools to complete simple construction projects including, but not limited to: Concrete, framing and roofing. (A, CSU)

50B BASIC RESIDENTIAL CONSTRUCTION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
General introductory and basic skills in residential construction. Emphasis on hand and power tools, interior and exterior finish, finish carpentry, and roofing. (A, CSU)

51 RESIDENTIAL CONSTRUCTION: FOUNDATIONS AND FRAMING
9 units, 4 lecture hours, 16 lab hours,
(Formerly Construction 51/52)
ADVISORY: Construction 50A or 50. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Hands-on construction of a residential house including construction of foundation forms, installation of rough plumbing, placement and finishing of concrete, lay out and construction of wall framing, placement of roof trusses and construction of associated roof framing, and the application of roofing material. (A, CSU)

52A INTRODUCTORY CONSTRUCTION MANAGEMENT 1
9 units, 4 lecture hours, 16 lab hours
ADVISORY: Construction 51 and 53 and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Learn basic construction management skills while taking on the role of lead carpenter during the construction of a home in our community. (A, CSU)

52B INTRODUCTORY CONSTRUCTION MANAGEMENT 2
9 units, 4 lecture hours, 16 lab hours
ADVISORY: Construction 51 and 53 and eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Students will learn basic construction management skills while taking on the role of lead carpenter during the construction of the construction program's project house or residential related projects. (A, CSU)
Course Descriptions

Course Descriptions

53 RESIDENTIAL CONSTRUCTION: EXTERIOR AND INTERIOR FINISH
9 units, 4 lecture hours, 16 lab hours,
(Formerly Construction 53/54)
ADVISORY: Construction 50 or 50B. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Hands on construction of a residential house, including window and door installation, stucco lathing, siding installation, drywall hanging and finishing, cabinet and hardware installation, finish carpentry, interior and exterior painting, fencing, and concrete flat work including driveways and walks. (A, CSU)

55 ROOF FRAMING SYSTEMS
2.5 units, 1 lecture hour, 5 lab hours
ADVISORY: Construction 50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Introduction to conventional and truss roof framing in residential construction including hands on construction of roof structures. You will learn about load path and structural integrity. Includes methods to calculate rafter, hip and other roof framing member lengths. (A, CSU)

56A RESIDENTIAL PLUMBING 1
3 units, 2 lecture hours, 4 lab hours
COREQUISITE: Construction 56AL. ADVISORY: Construction 50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Learn to design and install a residential waste, supply water and gas system by hands on installation in a home being built on a permanent site. You will also learn how the plumbing code affects how you design and install your plumbing work. Familiarization with the uniform plumbing code including inspection of systems leading to possible I.A.P.M.O. and or I.C.C. certification. (A, CSU)

56A RESIDENTIAL PLUMBING LAB 1
0.5 unit, 1.5 lab hours
COREQUISITE: Construction 56A. ADVISORY: Construction 50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Off campus lab activity installing plumbing systems in the Fresno City College Project House. To be taken concurrently (same semester) with Construction 56A. (A, CSU)

56B RESIDENTIAL PLUMBING 2
3 units, 2 lecture hours, 4 lab hours
COREQUISITE: Construction 56BL. ADVISORY: Construction 50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Correct installation techniques for residential finish plumbing fixtures and the code requirements associated with them. Familiarization with the uniform plumbing code including inspection of systems leading to possible I.A.P.M.O. and or I.C.C. certification. Construction 56B to be taken concurrently (same semester) with Construction 56BL. (A, CSU)

56B RESIDENTIAL PLUMBING LAB 2
0.5 unit, 1.5 lab hours
COREQUISITE: Construction 56B. ADVISORY: Construction 50 or 50A. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Off campus lab activity installing plumbing systems in the Fresno City College project house. To be taken concurrently (same semester) with Construction 56B. (A, CSU)

60 ENERGY EFFICIENT REMODELING
8 units, 4 lecture hours, 13 lab hours
ADVISORY: Construction 50A and 50B or Construction 53 or Construction 50. Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Cosmetic and structural residential improvements with an emphasis on improving energy efficiency. Lab to be hands on in an existing home. (A, CSU)

65 FUNDAMENTAL CONSTRUCTION ELEMENTS
3 units, 3 lecture hours
ADVISORY: Applied Technology 130. Eligibility for English 1A recommended.

Introductory skills in residential construction including OSHA 10 certification, basic drafting, computer applications, construction calculations and construction equipment. (A, CSU)

149 INTRODUCTION TO CONSTRUCTION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Applied Technology 130. Eligibility for English 1A recommended.

Overview of trades and careers related to the construction industry. Hands on lab activities related to selected areas of construction. (A)
175A RESIDENTIAL WIRING 1
4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Construction 175AL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Introduction to electrical code, installation methods. Electrical circuits hands on practice. Installation of the rough electrical system in the Fresno City College construction program's project house at an off campus location. Construction 175AL must be taken concurrently with Construction 175A. (A)

175AL RESIDENTIAL WIRING LAB 1
0.5 unit, 1.5 lab hours
COREQUISITE: Construction 175A. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Hands on Rough Wiring of a residential building. Course must be taken concurrently with Construction 175A. (A)

175B RESIDENTIAL WIRING 2
4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Construction 175BL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Electrical code. Hands on finish equipment installation, troubleshooting. Specialty circuits. Installation of the finish materials in the City College construction program's project house. Construction 175BL must be taken concurrently with Construction 175B. (A)

175BL RESIDENTIAL WIRING LAB 2
0.5 unit, 1.5 lab hours
COREQUISITE: Construction 175B. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.

Students will apply classroom knowledge and gain hands on experience during installation of finish apparatus in the FCC project house. Course must be taken concurrently with Construction 175B. (A)

COUNSELING (COUN)

43 GROUP DYNAMICS AND SELF UNDERSTANDING
2 units, 2 lecture hours, (Formerly Guidance Studies 43)
ADVISORY: Eligibility for English 1A recommended.
An in-depth look at concepts key to self-understanding and developing a support system. This includes addressing psycho-social topics such as: personal responsibility, stress-management, interpersonal skills and communication. (A, CSU)

48 CAREER PLANNING AND DEVELOPMENT
2 units, 2 lecture hours, (Formerly Guidance Studies 48)
ADVISORY: Eligibility for English 1A recommended.
Designed to guide students in choosing their career fields and correlated majors, includes self assessment, career exploration, occupational outlook, computerized resources and career information systems. (A, CSU)

53 COLLEGE AND LIFE MANAGEMENT
3 units, 3 lecture hours, (Formerly Guidance Studies 53)
ADVISORY: Eligibility for English 1A recommended.
This course is designed to assist students in developing the necessary tools for future success by providing structures and activities that illustrate the relationship between interpersonal and intrapersonal interactions. Course topics include development of student's personal strengths, interpersonal relationships, personal values, healthy lifestyle choices, and success skills. (A, CSU, UC)

54 CIVIC RESPONSIBILITY AND LEADERSHIP
1 unit, 1 lecture hour, (Formerly Guidance Studies 54)
ADVISORY: Eligibility for English 1A recommended.
Designed to assist students with the transition process from college to other life roles. Understanding role responsibilities to self and the community. Soft skills, leadership development, and life planning. (A, CSU)
150 COLLEGE TRANSITION AND SUCCESS
1 unit, 1 lecture hour, (Formerly Guidance Studies 50, 150, and Counseling 250)
ADVISORY: Eligibility for English 125 and 126 recommended.
Designed to provide students with personal and academic support during their transition onto the campus and campus culture. Resources and learner-centered strategies include supportive services, self-assessment, time management, campus resources, catalog information, educational planning, career awareness, interdependence, personal responsibility and many others that will help students with academic growth, personal growth, retention, persistence and success. (A)

247A COLLEGE STUDY SKILLS, GENERAL HABITS
1 unit, 2 lecture hours, (9 weeks), (Formerly Guidance Studies 47A, 52, and 147A)
ADVISORY: Eligibility for English 125 and 126 recommended.
Establishing effective success strategies such as study habits, goal-setting, time and life management, improving concentration, active listening, college resources and educational planning.

247B COLLEGE STUDY SKILLS, ACADEMIC SKILLS
1 unit, 2 lecture hours, (9 weeks), (Formerly Guidance Studies 47B, 52, and 147B)
ADVISORY: Eligibility for English 125 and 126 recommended.
Designed to help students establish academic skills to be successful in college. Topics include; study-skills strategies for lecture and textbook note taking, memorization techniques, test taking strategies and other study methods.

249 JOB PREPARATION
1 unit, 1 lecture hour, (Formerly Guidance Studies 49 and 149)
ADVISORY: Eligibility for English 125 and 126 recommended.
Development of positive interpersonal relationships in the workplace. Includes practicing interview techniques and positive workplace behaviors, exploring career implications and the job market.

267 FINANCIAL AID MONEY MANAGEMENT
1 unit, 1 lecture hour, (Formerly Guidance Studies 167 and Counseling 167)
ADVISORY: Working knowledge of basic arithmetic recommended.
Designed to help develop a basic awareness of financial aid money management skills including personal student budgeting, and the nature and purpose of financial aid assistance.

CRIMINOLOGY (CRIM)
FORMERLY ADMINISTRATION OF JUSTICE

1 INTRODUCTION TO CRIMINOLOGY
3 units, 3 lecture hours, (Formerly Administration of Justice 1)
ADVISORY: English 1A recommended.
Characteristics of the criminal justice system in the U.S. with cross cultural content; evolution of prevailing principles; crime measurement; theoretical explanations for criminality and responses to it; future challenges; functions of the police, courts and correctional system; legal process, sentencing, and incarceration policies. (C-ID AJ 110) (A, CSU, UC)

3 LEGAL ASPECTS OF EVIDENCE
3 units, 3 lecture hours, (Formerly Administration of Justice 3)
ADVISORY: Eligibility for English 1A recommended.
Categories of evidence, and the legal rules relating to admission or exclusion with attention to history and development. (C-ID AJ 124) (A, CSU)

4 PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM
3 units, 3 lecture hours, (Formerly Administration of Justice 4)
ADVISORY: Eligibility for English 1A recommended.
Examination and analysis of due process in the criminal justice system from pre-arrest through trial and appeal using statutory, case law, and constitutional precedents. (C-ID AJ 122) (A, CSU)

5 COMMUNITY RELATIONS
3 units, 3 lecture hours, (Formerly Administration of Justice 5)
ADVISORY: Eligibility for English 1A recommended.
Relationship between our communities and the justice system in addressing crime and conflict; challenges and potential for administering criminal justice within a multicultural society with conflicting values in culture, religion, and law. (C-ID AJ 160) (A, CSU, UC)

6 CONCEPTS OF CRIMINAL LAW
3 units, 3 lecture hours, (Formerly Administration of Justice 6)
ADVISORY: Eligibility for English 1A recommended.
Analysis of criminal liability in the U.S.; classification of crimes (persons, property, morals, and public welfare), elements of offenses; common and statutory law; acceptable evidence; defenses; prosecution and defense decision making. (C-ID AJ 120) (A, CSU, UC)
7 CONCEPTS OF ENFORCEMENT SERVICES
3 units, 3 lecture hours, (Formerly Administration of Justice 7)
ADVISORY: Eligibility for English 1A recommended.
Role expectations for line enforcement officers; patrol, traffic and public service responsibilities; physical and psychological officer survival. (A, CSU)

8 CRIMINAL INVESTIGATION
4 units, 3 lecture hours, 3 lab hours, (Formerly Administration of Justice 8)
ADVISORY: Eligibility for English 1A recommended.
Techniques, procedures, and ethical considerations involved in crime investigation; organization of the process; crime scene logistics; searches; recovery and preservation of evidence; documentation; scientific examination; and trial presentation. (C-ID AJ 140) (A, CSU)

9 CRIME SCENE FORENSIC EVIDENCE
3 units, 3 lecture hours
PREREQUISITE: Criminology 8 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Introduction to forensics in criminal investigations; methods to properly locate, identify, handle, and analyze physical evidence; analysis of crime scenes; pattern evidence; instruments firearms; questioned documents; and controlled substances. (C-ID AJ 150) (A, CSU)

11 JUVENILE DELINQUENCY
3 units, 3 lecture hours, (Formerly Administration of Justice 11)
ADVISORY: Eligibility for English 1A recommended.
Origin, development and organization of the juvenile justice system in the U.S.; theories relating to the causes and prevention of juvenile delinquency, and the treatment of youthful offenders; legal processes and constitutional standards. (C-ID AJ 220) (A, CSU)

12 CRIMINAL JUSTICE COMMUNICATIONS
3 units, 3 lecture hours, (Formerly Administration of Justice 12)
ADVISORY: Eligibility for English 1A recommended.
Fundamentals of information gathering; preparation of public safety reports, testifying; formal and informal communication with public and official agencies. (A, CSU)

13 THE CONSTITUTION AND YOUR INDIVIDUAL RIGHTS
3 units, 3 lecture hours, (Formerly Administration of Justice 13)
ADVISORY: Eligibility for English 1A recommended.
History and development of the Constitution; analysis of notable cases; historic protection of individual rights; ability of government to limit those prerogatives. (A, CSU-GE, UC)

15 INTRODUCTION TO POLICE ETHICS
3 units, 3 lecture hours, (Formerly Administration of Justice 15)
ADVISORY: Eligibility for English 1A recommended.
Examination of issues relating to ethical standards and violations in the criminal justice system; practical and theoretical solutions; morality and ethics in human behavior. (A, CSU)

16 INTRODUCTION TO VICTIMOLOGY
3 units, 3 lecture hours, (Formerly Administration of Justice 16)
ADVISORY: Eligibility for English 1A recommended.
Philosophical, theoretical issues and analysis of the most recent research findings and their implications in relationship to victims of street crimes. Controversies surrounding victims and their relations with offenders, media, agencies, etc. (A, CSU)

18 CRIMINAL PERSONALITIES
3 units, 3 lecture hours, (See also Psychology 18)
ADVISORY: Eligibility for English 1A recommended.
Focus on the physiological, cognitive, and social factors involved in crime and the development of criminal personalities. An examination of an offender's expectations, rationalizations, and justifications for his/her criminal behavior. Emphasis on modern concepts of criminal personalities including sociopaths, psychopaths, and criminal psychopaths. The role of corrections at the federal, state, and local levels. Treatment classifications and management of the criminal personality, including sociopaths and psychopaths, within institutional settings. (A, CSU)
Dance Descriptions

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. Selection for program participation. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to criminology. Collaborative learning objectives established specific to criminology. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

20 INTRODUCTION TO CORRECTIONS
3 units, 3 lecture hours, (Formerly Administration of Justice 20)
ADVISORY: Eligibility for English 1A recommended.
History and analysis of the methods of punishment; alternatives to them, and their impact upon the justice system and its correctional component; adult and juvenile corrections (probation and parole); examination of penal institutions, their populations, and contemporary issues; alternative programs designed for specific Correctional Institutions, and their impact upon the Corrections client and the society at large. (C-ID AJ 200) (A, CSU)

21 CORRECTIONAL REPORT WRITING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The practical aspects of gathering, organizing, and preparing written reports for correctional activities on local, state, and federal levels. Techniques of communicating facts, information, and ideas effectively in a simple, clear, and logical manner for various types of criminal justice systems reports, letters, memoranda, directives, and administrative reports. Students will gain practical experience in note taking, report writing, and presenting testimony in court. (A, CSU)

23 CORRECTIONAL INTERVIEWING AND COUNSELING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An overview of the techniques in counseling and interviewing available to practitioners in corrections. The use of appropriate techniques and theories in confidence building which may be used by the correctional employee in client interviews and counseling. For students planning to enter or already employed within the correctional science field. (A, CSU)

24 CONTROL AND SUPERVISION IN CORRECTIONS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An overview of supervision of inmates in local, state, and federal correctional institutions. Issues of institutional control in a continuum from daily living through crisis situations. Emphasis on the role played by the offender and the correctional worker. Inmate subculture, violence, and the officers in a hostile prison environment. The causes and effects of abusive tactics. (A, CSU)

25 LEGAL ASPECTS OF CORRECTIONS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The historical framework, concepts and precedents that guide correctional practice. The corrections environment, the civil rights of prisoners, and the responsibilities and liabilities of corrections officials. (A, CSU)

36 GANGS AND CORRECTIONS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Specialized knowledge relating to the correctional impact of gangs. The history of gangs and the issues associated with the development of gangs. Focus on the emergence of prison gangs following a series of changes within correctional systems. Review of the types of gangs and the criminal activities associated with the gang. Special emphasis on the prison gang and correctional issues including identification, intake, classification, communication, and trends. Psychological and sociological dynamics. Institutional management and future trends. (A, CSU)

DANCE (DANCE)

8 HIP HOP TECHNIQUE
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Basic technique and style of Hip Hop dance both historical and current emphasizing musicality, rhythms, and the basic movement required to develop Beginning Hip Hop skills. (A, CSU)

9 DANCE CONDITIONING
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Conditioning techniques which promote body awareness, improve body alignment, enhance and expedite body ability for dance skills, and aid in preventing injuries common to various dance styles. (A, CSU, UC)
10A BEGINNING MODERN DANCE TECHNIQUE
1 unit, 3 lab hours, (Formerly Physical Education 4 and Dance 10)
ADVISORY: Eligibility for English 1A recommended.
Modern dance exercises and improvisations involving body movement, rhythm, design, dynamics, technique, and expression. Body conditioning exercises for posture, strength, and flexibility. (A, CSU, UC)

10B PRE-INTERMEDIATE MODERN DANCE TECHNIQUE
1 unit, 3 lab hours
PREREQUISITE: Dance 10A or appropriate dance experience as determined by the instructor. ADVISORY: Eligibility for English 1A recommended.
Pre-intermediate modern dance exercises and improvisations involving body movement, rhythm, design, dynamics, technique, and expression. Body conditioning exercises for posture, strength, and flexibility. (A, CSU, UC)

12A BEGINNING BALLET PART 1
1 unit, 3 lab hours, (Formerly Dance 12 and Physical Education 26)
ADVISORY: Eligibility for English 1A recommended.
Fundamental technique of classical Ballet using barre exercises and center work, basic concepts of Ballet dance vocabulary, and Ballet terminology for the beginning student. (A, CSU, UC)

12B BEGINNING BALLET PART 2
1 unit, 3 lab hours
PREREQUISITE: Dance 12A or equivalent as demonstrated through testing and recommended by instructors. ADVISORY: Eligibility for English 1A recommended.
Pre-intermediate-level technique of classical Ballet using barre exercises and center work, learning more Ballet terminology for the pre-intermediate student. (A, CSU, UC)

13A INTERMEDIATE BALLET TECHNIQUE
1.5 units, 1 lecture hour, 2 lab hours
PREREQUISITE: Dance 12B or relevant experience as determined by instructor. ADVISORY: Eligibility for English 1A recommended.
Intermediate level Ballet technique using barre exercises and center works, may include a demonstration of creating and teaching a ballet phrase in the class. (A, CSU, UC)

13B PRE-ADVANCED BALLET TECHNIQUE
1.5 units, 1 lecture hour, 2 lab hours
PREREQUISITE: Dance 13A or relevant experience as determined by instructor. ADVISORY: Eligibility for English 1A recommended.
Pre-advanced Ballet technique using barre exercises and center works, may include a demonstration of creating and teaching a ballet phrase and a short combination in the class. (A, CSU, UC)

14 BEGINNING JAZZ DANCE TECHNIQUE
1 unit, 3 lab hours, (Formerly Physical Education 27)
ADVISORY: Eligibility for English 1A recommended.
Fundamental technique of Jazz dance, utilizing basic steps and isolated body parts; conditioning exercises for strength, flexibility, balance, and alignment done in a rhythmic form of jazz and other contemporary music. (A, CSU, UC)

15 INTERMEDIATE JAZZ DANCE TECHNIQUE
1 unit, 3 lab hours
PREREQUISITE: Dance 14 or demonstration of comparable skill level to be determined by testing or video portfolio of past jazz dance performance work. ADVISORY: Eligibility for English 1A recommended.
A progressive refinement of jazz dance technique, building upon skills and techniques covered in Dance 14. Presentation of different jazz styles. (A, CSU, UC)

16 BEGINNING TAP DANCE
0.5 unit, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
An introduction of various tap styles, sequences, and dance patterns to develop rhythm, coordination, and balance. (A, CSU, UC)

17A BEGINNING MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 17A), (Formerly Dance 17)
ADVISORY: Eligibility for English 1A recommended.
History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the beginning level. (A, CSU-GE, UC)

17B BEGINNING INTERMEDIATE MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 17B)
PREREQUISITE: Chicano-Latino Studies/Dance 17A. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.
History and origin of Mexican dance, from the pre-Columbian era through the arrival of the Spaniards. Analysis of the form, function, and symbolism of the music, musical instruments, movements, and choreography. Examination of the role of gender in this art form. Dances practiced and performed at the pre-intermediate level. (A, CSU, UC)
18  INTERMEDIATE TAP DANCE
0.5 unit, 2 lab hours
PREREQUISITE: Dance 16 or appropriate previous tap dance experience as determined by the instructor. ADVISORY: Eligibility for English 1A recommended.
Progressive refinement of tap dance technique, building upon skills and techniques covered in Dance 16. Presentation of more advanced tap steps and styles. (A, CSU, UC)

20A  BEGINNING MODERN DANCE COMPOSITION
3 units, 2 lecture hours, 3 lab hours,
(Formerly Physical Education 20A)
ADVISORY: Eligibility for English 1A recommended. Dance 10A recommended.
Modern dance technique warm up and exercises for development of movement vocabulary, strength, flexibility, alignment, range of motion, and rhythmic coordination. Guided group improvisations will be used for development of personal movement vocabulary, creative outlet, and to hone in on basic improvisational skills. Study of modern dance as an art form including brief discussions on history and theory. Study of dance composition theories and conceptual approaches. Creation of solo and group work. (A, CSU-GE, UC)

20B  INTERMEDIATE MODERN DANCE COMPOSITION
3 units, 2 lecture hours, 3 lab hours,
(Formerly Physical Education 20B)
PREREQUISITE: Dance 10A. ADVISORY: Eligibility for English 1A recommended.
Modern dance technique warm up and exercises for development of movement vocabulary, strength, flexibility, alignment, range of motion, and rhythmic coordination. Guided group improvisations will be used for development of personal movement vocabulary, creative outlet, and to hone in on intermediate improvisational skills. Dance composition theories and conceptual approaches. Creation of solo and group work on a complex and multi-dimensional level. Hone in on one's own artistic voice and to be able to articulate their reasons for creation in an intelligent, comprehensive manner. (A, CSU, UC)

21  DANCE WORKSHOP PERFORMANCE
2-4 units, 1 lecture hour, 3-9 lab hours per unit,
(Formerly Physical Education 21)
PREREQUISITE: Previous Modern dance, Jazz, or Ballet experience or concurrent enrollment in Ballet, Jazz, or Modern dance recommended. For choreographers: Dance 20A or demonstration of comparable skill level to be determined by Artistic Director through testing and/or video portfolio of past Modern Dance, Ballet, Jazz performance work. ADVISORY: Eligibility for English 1A recommended.
Beginning dance technique and conditioning, improvisation, choreography, rehearsal, and performance on main stage in an informal setting. Diagnostic test in dance technique will be given during the first three weeks of the semester. Includes opportunities for support activities for the production. (A, CSU, UC)

22  DANCE THEATRE PERFORMANCE
2-4 units: 2 units, 1 lecture hour, 3 lab hours; 3 units, 1 lecture hour, 6 lab hours; 4 units, 1 lecture hour, 9 lab hours,
(Formerly Physical Education 22)
PREREQUISITE: Current intermediate competency in Ballet, Jazz, or Modern Dance and concurrent enrollment in Ballet, Jazz, or Modern Dance recommended. For choreographers: Dance 20A or demonstration of comparable skill level to be determined by Artistic Director through testing and/or video portfolio of past Modern Dance, Ballet, Jazz performance work. ADVISORY: Eligibility for English 1A recommended.
Intermediate level dance technique, conditioning, improvisation, choreography, rehearsal, and performance on main stage in a formal theatrical presentation. Participants need to demonstrate their technical level during the first three weeks of classes. (A, CSU, UC)

26  AMERICAN COLLEGE DANCE FESTIVAL
1.5 units, 2 lecture hours, 5 lab hours, (9 weeks), (Repeats = 3)
COREQUISITE: Dance 21 or 22. ADVISORY: Eligibility for English 1A recommended.
Preparation of dance participants for attendance at the American College Dance Festival. Participation in master classes and participation/attendance at adjudication concerts. (A, CSU)

27A  INTERMEDIATE MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 27A)
PREREQUISITE: Chicano-Latino Studies/Dance 17B. Demonstrated experience and skills at the beginning level as assessed by instructor. ADVISORY: Eligibility for English 1A recommended.
History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the intermediate level. (A, CSU, UC)
27B  ADVANCED MEXICAN FOLK DANCE
3.5 units, 3 lecture hours, 2 lab hours, (See also Chicano-Latino Studies 27B), (Formerly Dance 27)
PREREQUISITE: Chicano-Latino Studies/Dance 27A. ADVISORY: Eligibility for English 1A recommended.
History of the origin of Mexican dance, from the arrival of the Spaniards to the present time. Analysis of the form, function, and symbolism of the music, musical instruments, movements and choreographies. Dances practiced and performed at the advanced level. (A, CSU-GE, UC)

28  INTERMEDIATE MODERN DANCE TECHNIQUE
1.5 units, 1 lecture hour, 2 lab hours
ADVISORY: Dance 10B. Eligibility for English 1A recommended.
Intermediate-level modern dance, emphasis on inverted movement, fast-pace locomotor patterns, and weight sharing. (A, CSU, UC)

28B  PRE-ADVANCED MODERN DANCE TECHNIQUE
2 units, 1.5 lecture hours, 2 lab hours
PREREQUISITE: Dance 28.
Pre-Advanced-level modern dance, emphasis honing previous skills including a variety of locomotor patterns, creativity, and deeper understanding of modern dance concepts. (A, CSU, UC)

30  DANCE APPRECIATION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Survey of dance as a historical form of cultural and theatrical expression. Emphasis on the growth of ballet and modern dance from their origins to the current trends in the United States. Dance 30 does not meet the Physical Education requirement. (A, CSU-GE, UC, I)

31  DANCE WORKSHOP PERFORMANCE 2
2-4 units, 1 lecture hour, 3-9 lab hours
PREREQUISITE: Dance 21. ADVISORY: Eligibility for English 1A recommended.
Intermediate-advanced dance technique and conditioning, improvisation, choreography, rehearsal, and performance in an informal setting. Includes opportunities for support activities for the production. (A, CSU, UC)

32  DANCE THEATRE PERFORMANCE 2
2-4 units, 1 lecture hour, 3-9 lab hours
PREREQUISITE: Dance 22. ADVISORY: Eligibility for English 1A recommended.
Intermediate/advanced-level dance technique and conditioning, improvisation, choreography, rehearsal, and performance for formal theatrical presentation. (A, CSU, UC)

DECISION SCIENCE (DS)

21  FINITE MATHEMATICS
3 units, 3 lecture hours, (Formerly Decision Science 22)
PREREQUISITE: Mathematics 103 or placement by multiple measures. ADVISORY: Eligibility for English 1A recommended.
Applications of linear, exponential, and logarithmic functions, matrix operations, and inverse matrices. Linear programming techniques, mathematics of finance, probability, and counting theory. Limits, rates of change, and derivatives. (A, CSU-GE, UC, I)

23  BUSINESS STATISTICS
3 units, 3 lecture hours, 1 lab hour, (Formerly Business Administration 23)
PREREQUISITE: Mathematics 103 or placement by multiple measures.
The use of probability and predictive techniques to facilitate decision-making using data from disciplines including business, social sciences, psychology, life sciences, health sciences, and education. The analysis will incorporate the use of EXCEL/Other Statistical Software and a graphing calculator. Descriptive measures including central tendency and dispersion, probability theory, discrete and continuous probability distributions, sampling distributions, central limit theorem, time series, index numbers, statistical inference using one and two sample hypothesis tests using both the normal and t distributions for both means and proportions, estimation, correlation, regression, analysis of variance (ANOVA), and nonparametric methods including Chi-squared. (C-ID MATH 110) (A, CSU-GE, UC, I)

221  SUPPORT FOR FINITE MATHEMATICS
1 unit, 0.5 lecture hour, 1.5 lab hours
COREQUISITE: Decision Science 21.
Extends instruction in DS 21, providing additional hours of support per week. Instructor lead instruction, one-on-one tutoring. Small group and technology-enhanced instruction relating to DS 21 curriculum.

223  SUPPORT FOR BUSINESS STATISTICS
1 unit, 0.5 lecture hour, 1.5 lab hours
COREQUISITE: Decision Science 23.
Extends instruction in DS 23, providing three hours of additional support per week. Instructor Lecture, One-on-one tutoring. Small group and technology-enhanced instruction relating to DS 23 curriculum.
DENTAL HYGIENE (DH)

1A  ORAL BIOLOGY
   2 units, 2 lecture hours, 1 lab hour, (Fall, first year)
   PREREQUISITE: Biology 20 and 22 or Biology 21A and 21B.
   COREQUISITE: Dental Hygiene 3A, 4, and 10.
   Anatomy of orofacial structures; study of the physiological and structural functions of the teeth and supporting tissues; embryology and histology of oral structural formation; oral anatomy relative to administration of local anesthetic agents. (A, CSU)

1B  GENERAL AND ORAL PATHOLOGY
   4 units, 4 lecture hours, (Spring, first year)
   PREREQUISITE: Dental Hygiene 1A, 3A, 4, and 10. COREQUISITE:
   Dental Hygiene 2, 5A, 6A, 8A, 11 and 12.
   Pathologic processes; disease, inflammation, immunologic defense, degeneration, neoplasia, developmental disorders, healing and repair, recognition of normal and abnormal conditions in the oral cavity; recognition of abnormalities in the human body. (A, CSU)

1C  PERIODONTOLOGY
   2 units, 2 lecture hours, (Fall, second year)
   PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12.
   COREQUISITE: Dental Hygiene 5B, 6B, 7A and 13.
   Periodontal anatomy and histology; recognition of the normal and pathological periodontium, etiology and treatment of periodontal disorders; pathogenesis of inflammatory periodontal disease; periodontal examination, prognosis, and treatment planning; periodontal instrumentation; gingival curettage and other periodontal surgical procedures. (A, CSU)

1D  APPLIED PERIODONTICS
   1 unit, 1 lecture hour, (Spring, second year)
   PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13.
   COREQUISITE: Dental Hygiene 3B, 5C, 7B, 8B, 9 and 14.

2    DENTAL MATERIALS
    2 units, 1 lecture hour, 3 lab hours, (Spring, first year)
    PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE:
    Dental Hygiene 1B, 5A, 6A, 8A, 11 and 12.
    The properties, characteristics and use of numerous categories of materials used in dental procedures. Concepts of the dental health team with emphasis on dental hygiene care. (A, CSU)

3A  PRE-CLINICAL DENTAL HYGIENE TECHNIQUES
    4 units, 2 lecture hours, 6 lab hours, (Fall, first year)
    PREREQUISITE: Biology 31, and Communication 1 or 2. COREQUISITE:
    Dental Hygiene 1A, 4 and 10.
    Medical and dental histories; extra and intraoral examination; patient education; patient and operator positioning; asepsis and infection control procedures; use and care of instruments; patients records; clinical operations and appointment procedures; equipment maintenance and sterilization. (A, CSU)

3B  DENTAL SPECIALTIES
    1 unit, 2 lecture hours, 9 weeks, (Spring, first year)
    PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE:
    Dental Hygiene 1D, 5C, 7B, 8B, 9 and 14.
    The history of dental specialties including pediatric dentistry, orthodontics, periodontics, oral surgery, endodontics, prosthodontics, forensic odontology, and the role of the registered dental hygienist in each dental specialty. Specialties practice research and presentation. (A, CSU)

4    ORAL RADIOGRAPHY
    4 units, 2 lecture hours, 6 lab hours, (Fall, first year)
    PREREQUISITE: Biology 31. COREQUISITE: Dental Hygiene 1A, 3A and 10.
    History and physics of radiation; radiation protection; use of standard, panoramic, and computerized digital radiographic equipment; use of the intraoral camera; duplication of radiographic images; exposure, processing, mounting, and identification of standard, panoramic, and computerized radiographs and intraoral images; critiquing of oral radiographic images of normal and abnormal anatomy and artifacts; interpretation of radiographic and pictorial pathology of the hard and soft structures of the oral cavity. (A, CSU)

5A  CLINICAL DENTAL HYGIENE I
    2.5 units, 8 lab hours, (Spring, first year), (Pass/No Pass)
    PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE:
    Dental Hygiene 1B, 2, 6A, 8A, 11 and 12.
    Beginning experience in the treatment of adult and child patients; various clinical procedures including scaling and polishing techniques, oral inspection, dental and periodontal charting, principles of ultrasonic scaling, radiographic techniques, plaque control instruction, and fluoride application; principles of dental hygiene practice. (A, CSU)
5B CLINICAL DENTAL HYGIENE II
5 units, 16 lab hours, (Fall, second year),
(Pass/No Pass)
PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12.
COREQUISITE: Dental Hygiene 1C, 6B, 7A, and 13.
Intermediate experiences in the treatment of dental hygiene patients; includes principles and procedures of Dental Hygiene 5A plus techniques for pain management; various field experiences. (A, CSU)

5C CLINICAL DENTAL HYGIENE III
5 units, 16 lab hours, (Spring, second year),
(Pass/No Pass)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 3B, 7B, 8B, 9 and 14.
Advanced experience in patient treatment procedures; includes principles and procedures of Dental Hygiene 5A and Dental Hygiene 5B plus the techniques of soft tissue curettage, nitrous oxide-oxygen analgesia, and nutritional counseling. (A, CSU)

6A MEDICAL EMERGENCIES IN THE DENTAL OFFICE
1 unit, 2 lecture hours, (9 weeks),
(Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 8A, 11 and 12.
Prevention of emergency situations; management of dental and medical emergencies. CPR certification reviewed. (A, CSU)

6B PHARMACOLOGY
3 units, 3 lecture hours, (Fall, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13.
COREQUISITE: Dental Hygiene 1C, 5B, 7A, 11 and 13.
Sources, dosages, therapeutic action, and side effects of drugs used in dentistry; classification, administration, and effects of drugs; pharmacology, pharmacokinetics, and physiology of local anesthetic agents and nitrous oxide gas. Fulfills the computer literacy graduation requirement for Dental Hygiene majors only. (A, CSU)

7A COMMUNITY DENTAL HEALTH I
2 units, 2 lecture hours, (Fall, second year)
PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12.
COREQUISITE: Dental Hygiene 1C, 5B, 6B and 13.
Procedures for improving public health, community dental health, and target group selection. Introduction to biostatistics and dental research techniques. Principles of education. (A, CSU)

7B COMMUNITY DENTAL HEALTH II
1 unit, 1 lecture hour, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 3B, 5C, 8B and 14.
Community dental health; implementation of target group dental health project; tobacco cessation program; health care delivery systems; available methods for purchase of dental care; community fluoridation and biostatistics. (A, CSU)

8A PATIENT MANAGEMENT
2 units, 2 lecture hours, (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 11, and 12.
Patient characteristics, motivation, and management; interpersonal communication and treatment planning. Treatment of the compromised patient. (A, CSU)

8B PRACTICE AND FINANCIAL MANAGEMENT
2 units, 2 lecture hours, (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A, 8A and 13.
COREQUISITE: Dental Hygiene 1D, 3B, 5C, 7B, 9 and 14.
Office practice management and the dental hygienist’s role in the office team; ethical and legal aspects of dentistry and dental hygiene; personal business matters relating to dental hygiene practice. (A, CSU)

9 NUTRITION IN DENTISTRY
1 unit, 1 lecture hour, (Spring, second year)
Nutrition as it relates to dentistry; nutritional counseling and dietary surveys with clinical patients. (A, CSU)

10 HEAD AND NECK ANATOMY
2 units, 2 lecture hours, 1 lab hour,
(Fall, first year)
PREREQUISITE: Biology 20 and 22 or Biology 21A and 21B.
COREQUISITE: Dental Hygiene 1A, 3A, and 4.
Gross anatomical structure, relationship and function of organs of the head and neck regions. Naming of anatomic structures located in the head and neck area. (A, CSU)
11 LOCAL ANESTHESIA
2.5 units, 4 lecture hours, 3 lab hours, (9 weeks), (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A and 12.
Pharmacology and physiology of local and topical anesthetic agents; the concept of pain and pain control; anatomy of the trigeminal nerve, physiology of nerve conduction, and the blockage of nerve impulses. Preparation of the armamentarium for local anesthetic injections and techniques of regional anesthesia in dentistry. (A, CSU)

12 CLINICAL SEMINAR TOPICS I
1 unit, 2 lecture hours, (Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A and 11.
Seminar format with discussion of various topics dealing with beginning clinical practice of dental hygiene. Beginning level decision making, dental hygiene diagnosis, treatment planning, implementation of dental hygiene therapy and problem solving of clinical issues encountered in DH 5A, Clinical Dental Hygiene I. Instrument sharpening, beginning instrument sequencing, periodontal assessment charting, and dental computer technology. (A, CSU)

13 SEMINAR TOPICS II, ADVANCED INSTRUMENTATION
1 unit, 2 lecture hours, (Fall, second year)
PREREQUISITE: Dental Hygiene 12. COREQUISITE: Dental Hygiene 5B.
Various topics related to advanced clinical practice of dental hygiene. Incorporation of evidence based decision making (EBDM) in development of clinical judgment, dental hygiene diagnosis, care/ treatment planning, implementation of dental hygiene therapies and problem solving. Integration of advanced dental hygiene instruments, power scaling techniques, clinical skills and treatment modalities. The intent of DH 13 Seminar Topics II, Advanced Instrumentation, is to strengthen the student's ability to incorporate EBDM and advanced skill performance with instrumentation techniques. (A, CSU)

14 CLINICAL SEMINAR TOPICS III
1 unit, 2 lecture hours, (Fall, second year)
Seminar format with discussion of various topics dealing with advanced clinical practice of dental hygiene. Advanced level of decision making, clinical judgment, dental hygiene diagnosis, and problem solving of clinical issues encountered in DH 5C, Clinical Dental Hygiene III. Preparation for the Dental Hygiene National Board Examination, Mock Board Clinical examination, and state licensure examinations. (A, CSU)

200 CLINICAL DENTAL HYGIENE IV
.2-1 unit, 1.33-8 lab hours, (6 weeks), (Pass/No Pass)
PREREQUISITE: Graduation from an accredited Dental Hygiene Program.
Advanced experience in patient treatment procedures. Principles and procedures of Dental Hygiene 5A, 5B, and 5C. Provides treatment opportunities that allow students to maintain and perfect their dental hygiene skill level between program graduation and successful completion of clinical licensing examinations. Students must have current CPR certification and malpractice insurance.

DEVELOPMENTAL SERVICES (DEVSER)

50 ADAPTED FITNESS AND FLEXIBILITY
1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education 50)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/or maintenance of basic physical/mental skills with an introduction to basic nutrition, disability and pharmaceutical issues. Measured cardiovascular fitness, stretching, nutritional evaluation and current disability/pharmaceutical topics. (A, CSU, UC)

51 ADAPTED AQUATICS
0.5 unit, 2 lab hours, (Formerly Physical Education 51)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/or maintenance of basic physical skills, knowledge, and attitude for successful participation in aquatics. Measured skill performance and cardiovascular fitness. (A, CSU, UC)

52 ADAPTED SPORTS
0.5 unit, 2 lab hours, (Formerly Physical Education 52)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Sports skills of Frisbee, Frolf, Bocci, Horseshoe. (A, CSU, UC)

53 ADAPTED STRENGTH TRAINING
0.5 unit, 2 lab hours, (Formerly Physical Education 53)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development and/or maintenance of strength. Adapted fundamental/advanced strength, flexibility, and cardiovascular endurance. (A, CSU, UC)
54. ADAPTED WALKING AND CONDITIONING
1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education 8 and 54)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development
and/or maintenance of basic physical/mental conditioning skills with
and introduction to basic nutrition, disability and pharmaceutical issues.
Measured cardiovascular fitness, stretching, nutritional evaluation and
current disability/pharmaceutical topics. (A, CSU, UC)

55. ADAPTED FLEXIBILITY AND STRENGTH
1 unit, 1 lecture hour, 1 lab hour, (Formerly Physical Education 55)
ADVISORY: Eligibility for English 1A recommended.
Designed for students with disabling conditions. Development
and/or maintenance of flexibility, strength, and fitness using progressive
resistance, stretching, and cardiovascular fitness activities. A very basic
introduction to nutrition and current disability/pharmaceutical issues.
(A, CSU, UC)

250. WORKABILITY ASSESSMENT AND CAREER AWARENESS
3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass)
PREREQUISITE: None.
Designed for students with documented disabilities. Emphasizes
the development of tools, ideas, and strategies designed to be the blue­
prints for obtaining and retaining a job. Attitude and personality traits will
merge with goal setting and life management skills enabling students to
better link personal issues to long-term career success.

251. WORKABILITY PORTFOLIO AND INTERVIEW DEVELOPMENT
3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable
disability.
Designed for students with documented disabilities. Students
will complete portfolios which will include the following: Resumes, cover
letters, letters of recommendation, and references. Students will develop
and demonstrate interview skills. Students will become familiar with the
Americans with Disabilities Act.

252. WORKABILITY STRATEGIES AND COMMUNICATION SKILLS
3 units, 2 lecture hours, 3 lab hours, (Pass/No Pass)
PREREQUISITE: None.
Designed for students with documented disabilities. Emphasizes
developing strategies in the workplace and personal life related to personal
ability, work ethics, communication and socialization. Expanding
communication skills as a vehicle for solving problems.

260. WORKABILITY JOB SEARCH
3 units, 3 lecture hours, (Pass/No Pass),
(Formerly Developmental Services 60)
PREREQUISITE: None.
Designed for students with documented disabilities. Emphasizes
the development of job search strategies including online applications,
social networking sites, internet job search sites, creating and utilizing
a professional network. Demonstrates how a targeted job search leads
the student through the process of identifying open positions for which
students are qualified. Students will develop and maintain a job search
log during their job search process.

262. GROUP INTERACTION FOR STUDENTS WITH DISABILITIES
2 units, 2 lecture hours, (Pass/No Pass),
(Formerly Developmental Services 62)
PREREQUISITE: None.
Development and improvement of self-understanding through
group interactions. Designed for students with documented disabilities.

264. TRANSITION TO COLLEGE FOR STUDENTS WITH DISABILITIES
1 unit, 1 lecture hour, (Pass/No Pass)
PREREQUISITE: Student must have a diagnosed, verifiable
disability.
Designed for students with documented disabilities. Assist stu­
dents with disabilities in preparing for initial semester in a community
college. Navigation of State Center Community College District cam­
puses, resources, academic policies, procedures and services. Course
content will cover issues related to accommodations and resources
available to students with disabilities to enable them to be successful
in a college setting, including disability evaluation and assessment,
alternative media, course selection, and scheduling.
272 CONSUMER SKILLS
2 units, 6 lab hours, (Pass/No Pass),
(Formerly Developmental Services 72)
PREREQUISITE: None.
Designed for students with documented disabilities. Emphasis on home and money management, health, hygiene and safety, and food and nutrition.

273 INDEPENDENT LIVING SKILLS FOR DSP&S STUDENTS
2 units, 6 lab hours, (Pass/No Pass),
(Formerly Developmental Services 73)
PREREQUISITE: None.
Designed for students with documented disabilities. Basic independent living skills. Including appropriate social interaction, self-advocacy, self-care, community involvement, personal choice and managing life events.

275 HORTICULTURE SKILLS I
2 units, 6 lab hours, (Pass/No Pass),
(Formerly Developmental Services 75)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Basic techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills.

276 HORTICULTURE SKILLS II
2 units, 6 lab hours, (Pass/No Pass),
(Formerly Developmental Services 76)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 275.
Designed for students with documented disabilities. Intermediate techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills.

277 ADAPTED COMPUTER LITERACY
2 units, 1 lecture hour, 3 lab hours
(Pass/No Pass), (Formerly Developmental Services 77)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Introduction to computers and commonly used microcomputer applications. Emphasis on computer use and adaptation. In depth coverage of computers and their impact in society.

278 MODIFIED WORD PROCESSING
2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Formerly Developmental Services 78)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 277.
Designed for students with documented disabilities. Basic word processing terminology and understanding of Microsoft Word.

279 MODIFIED COMPUTER APPLICATIONS
2 units, 1 lecture hour, 3 lab hours, (Pass/No Pass), (Formerly Developmental Services 79)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Development Services 278.
Expansion and enhancement of word processing, data management, spreadsheet, and other highly marketable microcomputer applications.

282 GREENHOUSE WORKFORCE PREP
3 units, 9 lab hours, (Pass/No Pass),
(Formerly Developmental Services 82)
PREREQUISITE: Student must have a diagnosed, verifiable disability. ADVISORY: Developmental Services 275 and 276.
Designed for students with documented disabilities. Introduction to vocational training in an actual working greenhouse. Assists students in preparing for success in future employment. Topics include ornamental and vegetable plant growing and care, occupational behavior and interpersonal skill development. Designed for students with documented disabilities.

291 STRATEGIES FOR ACADEMIC SUCCESS
2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: None.
Designed for students with communicative, and/or learning disabilities. Identification of learning strengths and weaknesses, educational, personal, career goals, study principles, methods and strategies to achieve them.

292 COLLEGE AWARENESS SURVIVAL SKILLS
2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: None.
Designed for students with documented disabilities. Development of college survival skills. Emphasis on time management, note-taking, test taking, library skills, improvement of communication skills, and career exploration.
DIFFERENTIAL LEARNING DIAGNOSIS
8 lab hours, (Pass/No Pass), (Repeats = 3), (Open Entry/Open Exit),
(Formerly Developmental Services 59)
PREREQUISITE: Student must have a diagnosed, verifiable disability.
Designed for students with documented disabilities. Learning Assessment to identify learning strengths and deficits to provide information to the DSP&S for validation & verification of a disability and accommodations needed. Learning disability assessment to determine eligibility for services in California Community Colleges.

DRAFTING (DRAFT)
SEE ALSO COMPUTER AIDED DRAFTING AND DESIGN

DRAFTING PRACTICES
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Working knowledge of basic arithmetic recommended.
Freehand sketching, orthographic projection, measuring devices, geometric construction, pictorial drawing and dimensioning. (A, CSU)

ECONOMICS (ECON)

INTRODUCTION TO ECONOMICS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Mathematics 201 recommended.
Introduction to market economies and contemporary economic issues through a survey of microeconomic and macroeconomic concepts. Topics include supply and demand, role of government, production and costs, measuring the macroeconomy, economic policy, and economic growth. Course is not designed for students majoring in Business or Economics. (A, CSU-GE)

INTRODUCTION TO MICROECONOMICS
3 units, 3 lecture hours, (Formerly Economics 1B)
PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.
An introductory analysis focusing on the economic choices of individuals. Topics include: scarcity, comparative advantage, market equilibrium, elasticity, cost theory, market structures, factor markets and market failure. (C-ID ECON 201) (A, CSU-GE, UC, I)

HONORS INTRODUCTION TO MICROECONOMICS
3 units, 3 lecture hours, (Formerly Economics 1BH)
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.
An introductory analysis focusing on the economic choices of individuals. Topics include: scarcity, comparative advantage, market equilibrium, elasticity, cost theory, market structures, factor markets and market failure. Honors sections will discuss and analyze contemporary economic society in historical context. (C-ID ECON 201) (A, CSU-GE, UC, I)

INTRODUCTION TO MACROECONOMICS
3 units, 3 lecture hours, (Formerly Economics 1A)
PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.
An introductory analysis of aggregate economic variables. Topics include: market systems, aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics and economic growth. (C-ID ECON 202) (A, CSU-GE, UC, I)

HONORS INTRODUCTION TO MACROECONOMICS
3 units, 3 lecture hours, (Formerly Economics 1AH)
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.
An introductory analysis of aggregate economic variables. Topics include: market systems, Aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics and economic growth. Honors sections will discuss and analyze the works of historical economic figures. (C-ID ECON 202) (A, CSU-GE, UC, I)
EDUCATION (EDUC)

6  INTRODUCTION TO SPECIAL EDUCATION
   3 units, 3 lecture hours, (Formerly Educational Aide 6 and 60)
   ADVISORY: Eligibility for English 1A recommended.
   An overview of special education in Kindergarten through grade 12 (K-12). Includes the history of special education, laws and regulations governing service provision, philosophies, assessment methods and personnel requirements. (A, CSU)

7  EXCEPTIONAL LEARNERS
   3 units, 3 lecture hours, (Formerly Educational Aide 7 and 61)
   ADVISORY: Eligibility for English 1A recommended.
   An introduction to the variations in development of children with special needs ages birth through eighteen and the implications for education settings. Includes an overview of development, characteristics of specific disabilities, and strategies and adaptations for supporting learning and development for all children. (A, CSU)

19  WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
   1-8 units, (Formerly Educational Aide 19)
   COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student’s major. Offered under specific majors.
   Supervised employment extending the classroom based on occupational learning related to secondary teacher education. Collaborative learning objectives established specific to the secondary teacher education field. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (C-ID EDUC 200 = EDUC 19 + EDUC 30) (A, CSU, UC)

30  INTRODUCTION TO TEACHING
   3 units, 3 lecture hours
   ADVISORY: Eligibility for English 1A recommended.
   Introduction to the concepts and issues related to teaching diverse learners in today's contemporary schools, Kindergarten through grade 12 (K-12). Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, California’s content standards and frameworks, and teacher performance standards. (C-ID EDUC 200 = EDUC 30 + EDUC 19) (A, CSU, UC)

ELECTRICITY
SEE ELECTRICAL SYSTEMS TECHNOLOGY

ELECTRICAL SYSTEMS TECHNOLOGY (EST)
FORMERLY ELECTRONIC TECHNOLOGY

19  WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
   1-8 units, (Formerly Electronic Technology 19)
   COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course in addition to occupational work experience. Supervised employment directly related to the student's major. Offered under specific majors.
   Supervised employment extending the classroom based on occupational learning related to electrical systems technology. Collaborative learning objectives established specific to electrical systems technology. Seventy-five hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)
50 **INTRODUCTION TO ELECTRONICS**
3 units, 3 lecture hours, (Formerly Electronic Technology 50)
ADVISORY: Eligibility for English 1A recommended.
An introduction to electronics and the Electrical Systems Technology program. Intensive review and practice in the reading & math skills, and critical thinking necessary for success in any electronics or electrically related career. (A, CSU)

51 **DIRECT CURRENT FUNDAMENTALS OF ELECTRONICS**
3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 51)
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 53 and Applied Technology 130.
Fundamental principles and applications of direct current circuits. Emphasis on properties of conductors, insulators, and basic components and circuit theory. (A, CSU)

52 **ALTERNATING CURRENT FUNDAMENTALS**
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 51 and Applied Technology 10.
Fundamental principles and applications of alternating current circuits. Emphasis on comparing and contrasting direct current and alternating current, power production, and residential, commercial, industrial applications. (A, CSU)

53 **LAB SAFETY PRACTICES**
2 units, 2 lecture hours, 1 lab hour,
(Formerly Electronic Technology 57)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the proper and safe use of hand tools, electrical devices/instruments, and component identification, and general circuit assembly procedures. (A, CSU)

54 **INTEGRATED DEVICES**
3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 52)
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 52 recommended.
Fundamentals of integrated devices and their applications. Proper and safe use of test equipment. (A, CSU)

55A **DIGITAL CONCEPTS**
3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 53)
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital systems and subcomponents. Introduction to analog vs. digital world, numbering systems, logic gates, decoders, encoders, multiplexer and multiplexed transmission, registers and memory devices, as well as, digital circuit design using computer software. (A, CSU)

55B **FACILITY AUTOMATION**
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 50. Eligibility for English 1A recommended.
Facility automation fundamentals identifying various aspects of the control systems within a commercial building. (A, CSU)

55C **SCADA SYSTEMS**
2 units, 2 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 56B. Eligibility for English 1A recommended.
Principles and applications of SCADA. Aspects of the data acquisition system including system specifications and software applications. (A, CSU)

56A **WIRING METHODS**
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1A recommended.
Introduction and application of electrical wiring methods as recognized by the National Electrical Code. Includes wiring methods and procedures for residential, commercial and industrial applications. Major emphasis will be placed upon electrical safety. (A, CSU)

56B **MOTOR CONTROLS**
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1A recommended.
Investigation and implementation of motor control. Emphasis on the fundamentals of logic and wiring as applied to motor controls. (A, CSU)

56C **INDUSTRIAL ELECTRONICS**
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54, 56B and 58. Eligibility for English 1A recommended.
Application of electronic principles in the industrial environment. Emphasis on variable frequency drives, control circuits and electronic components. (A, CSU)
57A  ANALOG COMMUNICATIONS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 55A. Eligibility for English 1A recommended.
Analog modulation techniques and the frequency spectrum. (A, CSU)

57B  DIGITAL COMMUNICATIONS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 55A. Eligibility for English 1A recommended.
Digital multiplexing, digital conversions, and network communication. (A, CSU)

57C  VOICE AND DATA CABLING
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1A recommended.
The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission. (A, CSU)

58  PROGRAMMABLE LOGIC CONTROLLERS
3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 58)
ADVISORY: Electrical Systems Technology 56B. Eligibility for English 1A recommended.
Basic programming of programmable logic controllers, and input/output device interfacing. (A, CSU)

59  INSTRUMENTATION SYSTEMS
3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 60)
ADVISORY: Electrical Systems Technology 50 or 51. Eligibility for English 1A recommended.
Basic instrumentation and control concepts with application in process control systems. Calibrating, terminology, and Piping and Instrument Diagram (P&ID) symbols as established by the Instrumentation, Systems, and Automation Society. (A, CSU)

60  A+PC MAINTENANCE AND REPAIR
3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 61)
ADVISORY: Electrical Systems Technology 50. Eligibility for English 1A recommended.
Skills for computer hardware support; installation, configuration, diagnosing and troubleshooting computer hardware. (A, CSU)

61  NETWORKING FUNDAMENTALS
3 units, 3 lecture hours, 1 lab hour,
(Formerly Electronic Technology 59)
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 55A, 60 and Applied Technology 10 strongly recommended.
Principles and structure of IP Addressing, the fundamentals of Ethernet, TCP/IP Protocol and equipment operation. This class prepares the student for the Cisco CCENT and/or CCNA Certification. (A, CSU)

62  ROUTER & SWITCHING ESSENTIALS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 61. ADVISORY: Eligibility for English 1A recommended.
Describes the architecture, components, and operations of routers and switches in a network. This class prepares the student for the Cisco CCENT and/or CCNA Certification. (A, CSU)

63  SCALING NETWORKS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 62. ADVISORY: Eligibility for English 1A recommended.
Describes the architecture, components, and operations of routers and switches in a larger and complex network. This class prepares the student for the Cisco CCNA Certification. (A, CSU)

64  ADVANCED NETWORKING AND MANAGEMENT
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Electrical Systems Technology 63. ADVISORY: Eligibility for English 1A recommended.
Discusses the WAN technologies and network services required by converged applications in a complex network. This class prepares the student for the Cisco CCNA Certification. (A, CSU)

80  INTRODUCTION TO PHOTOVOLTAICS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54. Eligibility for English 1A recommended.
Designed for students interested in an entry level career in the solar industry. Introduction to the fundamental principles and functions of the photovoltaic industry along with the physical installation for a photovoltaic system. (A, CSU)
81 PHOTOVOLTAIC SYSTEMS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54 and 56A. Eligibility for English 1A recommended.
Introduction of photovoltaic system requirements, design and configurations, installation techniques, and their applications in residential, commercial, and industrial. (A, CSU)

82A INTRODUCTION TO ROBOTICS
3.5 units, 3 lecture hours, 2 lab hours
ADVISORY: Electrical Systems Technology 50 or 51. Eligibility for English 1A recommended.
Equipment (tools, computers and machinery) and processes used in the development and construction of robotics used in manufacturing, medical and aerospace industries. Creating prototype drawings and constructing various prototype robots. (A, CSU)

82B ROBOTIC APPLICATIONS
3.5 units, 3 lecture hours, 2 lab hours
PREREQUISITE: Electrical Systems Technology 82A or with instructor approval. ADVISORY: Eligibility for English 1A recommended.
Introduction to the applications of robotics in industry, with emphasis on automated work cells set-up, programming and operations. Course topics will include basic concepts and components of a typical automated work cells and robotic designs and production line interfacing are studied. Students will design work cells and develop functional work cell simulators. (A, CSU)

83A ROBOTICS, INDUSTRIAL - INTRODUCTION
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 54.
This introduction covers the basic operation, programming, and vision integration with industrial robots. (A, CSU)

83B ROBOTICS, INDUSTRIAL – ADVANCED APPLICATION
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended. Electrical Systems Technology 83A.
Advanced maintenance, programming, operation, and collaborative applications. (A, CSU)

84A INTRODUCTION TO BIOMEDICAL ELECTRONICS
3 units, 3 lecture hours
PREREQUISITE: Electrical Systems Technology 51, 52, and 54.
ADVISORY: Eligibility for English 1A recommended.
A study of biomedical instrumentation and equipment used in the health care field. (A, CSU)

96A NATIONAL ELECTRICAL CODE PART 1
3 units, 3 lecture hours
ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended.
Application of all rules for engineering, designing, installing, maintaining, and inspecting electrical systems. Designed for newcomers and professionals seeking preparation for obtaining additional certifications or further knowledge. Branch circuits, electrical services, overcurrent protection and grounding Part I. (A, CSU)

96B NATIONAL ELECTRICAL CODE PART 2
3 units, 3 lecture hours
ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended.
Application of the rules for engineering, designing, installing, maintaining and inspecting installations. Designed for newcomers to the electrical industry and professional seeking preparation for obtaining additional certifications or further knowledge. General wiring, motors, controls, transformers, other equipment and grounding, Part II. (A, CSU)

96C NATIONAL ELECTRICAL CODE PART 3
3 units, 3 lecture hours
ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended.
Application of the rules for engineering, designing, installing, maintaining and inspecting electrical installations. Designed for newcomers to the electrical industry and professionals seeking preparation for obtaining additional certifications or further knowledge. General wiring, motors, controls, transformers, other equipment and grounding. (A, CSU)

96D NATIONAL ELECTRICAL CODE – ELECTRICAL SAFETY
3 units, 3 lecture hours
ADVISORY: Electrical Systems Technology 55B, 56A, and 56B. Eligibility for English 1A recommended.
Fundamentals of electrical safety as required by NFPA Document 70E. (A, CSU)
175 RESIDENTIAL WIRING
4 units, 3 lecture hours, 4 lab hours, (See also Construction 175), (Formerly Electronic Technology 75 and Electrical Systems Technology 75)
ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 125 and 126 or English for Multi-Lingual Students 67 or 68 recommended.
Introduction, technique and installation of the electrical wiring system for a single-family residence. Installation of the actual wiring system for the Fresno City College construction department's single-family residence at an off-campus location. Emphasis on current wiring practices and electrical codes. (A)

175A RESIDENTIAL WIRING 1
4 units, 3 lecture hours, 3 lab hours, (See also Construction 175A)
COREQUISITE: Electrical Systems Technology 175AL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Introduction to electrical code, installation methods. Electrical circuits hands on practice. Installation of the rough electrical system in the Fresno City College construction program's project house at an off campus location. Electrical Systems Technology 175AL must be taken concurrently with Electrical Systems Technology 175A. (A)

175AL RESIDENTIAL WIRING LAB 1
0.5 unit, 1.5 lab hours, (See also Construction 175AL)
COREQUISITE: Electrical Systems Technology 175A. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Hands on rough wiring of a residential building. Course must be taken concurrently with Electrical Systems Technology 175A. (A)

175B RESIDENTIAL WIRING 2
4 units, 3 lecture hours, 3 lab hours, (See also Construction 175B)
COREQUISITE: Electrical Systems Technology 175BL. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Electrical Code. Hands on finish equipment installation, trouble shooting. Specialty circuits. Installation of the finish materials in the City College construction program's project house. Electrical Systems Technology 175BL must be taken concurrently with Electrical Systems Technology 175B. (A)

175BL RESIDENTIAL WIRING LAB 2
0.5 unit, 1.5 lab hours, (See also Construction 175BL)
COREQUISITE: Electrical Systems Technology 175B. ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Students will apply classroom knowledge and gain hands on experience during the installation of finish apparatus in the FCC project house. Course must be taken concurrently with Electrical Systems Technology 175B. (A)

ELECTRONICS
SEE ELECTRICAL SYSTEMS TECHNOLOGY (EST)

ENGINEERING (ENGR)

1A ELEMENTARY PLANE SURVEYING 1
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 4A. ADVISORY: Eligibility for English 1A recommended.
Principles and practice of plane surveying: office computations and design; operation of surveying field equipment; and production of engineering plans/maps. Topics include distances, angles, and directions; differential leveling; traversing; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; land description techniques; and GPS. Extensive field work using tapes, levels, transits, theodolites and total stations. (C-ID ENGR 180) (A, CSU, UC)

2 GRAPHICS
4 units, 2 lecture hours, 6 lab hours
PREREQUISITE: Mathematics 4A. ADVISORY: Eligibility for English 1A recommended.
Principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD). Topics include the development of visualization and sketching skills, orthographic projections, mechanical dimensioning and tolerancing practices, 2D and 3D CAD skills and the engineering design process. The use of CAD software is an integral part of the course. (C-ID ENGR 150) (A, CSU, UC)
4 ENGINEERING MATERIALS
3 units, 3 lecture hours, (Formerly Engineering 32)
PREREQUISITE: Chemistry 1A and Physics 4A. ADVISORY: Eligibility for English 1A recommended.
Properties of engineering materials and their relation to atomic structure. The effect of microstructure on the mechanical, electrical, magnetic and thermal properties. Phase equilibria and strengthening processes for metals, ceramics, and polymers. (A, CSU, UC)

5 PROGRAMMING AND PROBLEM SOLVING IN MATLAB
4 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 5A. ADVISORY: Eligibility for English 1A recommended.
Utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem solving methods relevant to science and engineering. 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. (C-ID ENGR 220) (A, CSU, UC)

6 CIRCUITS WITH LAB
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4B. COREQUISITE: Mathematics 7. ADVISORY: Eligibility for English 1A recommended.
An introductory course in the analysis of DC and AC linear circuits containing resistors, inductors, capacitors, independent and dependent voltage and current sources, and operational amplifiers. Lecture topics include Ohm's Law, Kirchhoff's Laws, node and mesh analysis, Thevenin's and Norton's Theorems, superposition, natural and forced response in first and second order circuits, phasor analysis, resonance, AC steady-state power calculations, power transfer, and energy concepts. Lab component includes construction, testing, and analysis of linear electrical circuits. (C-ID ENGR 260 & 260L) (A, CSU, UC)

8 STATICS
3 units, 3 lecture hours, (Formerly Engineering 25)
PREREQUISITE: Physics 4A. COREQUISITE: Mathematics 6. ADVISORY: Eligibility for English 1A recommended.
Rigid bodies in static equilibrium when acted upon by forces and couples in two- and three-dimensional space. Included are the equilibrium of rigid bodies, trusses, frames, beams, and machines, as well as the calculations of the centers of mass, centroids, friction, and moments of inertia. Additional topics which may be covered include distributed forces in cables, beams, and fluid statics; mass moments of inertia; and virtual work. (C-ID ENGR 130) (A, CSU, UC)

10 INTRODUCTION TO ENGINEERING
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
This course explores the branches of engineering, the functions of an engineer, and the industries in which engineers work. Explains the engineering education pathways and explores effective strategies for students to reach their full academic potential. Presents an introduction to the methods and tools of engineering problem solving and design including experimentation, data analysis, computer and communication skills, and the interface of the engineer with society and engineering ethics. (C-ID ENGR 110) (A, CSU, UC)

11 MANUFACTURING PROCESSES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Processing and manufacturing techniques for steel, ceramics, polymers, composites and other industrial materials. Topics include the capabilities and limitations of casting, welding, forming, and machining. Demonstrations and field trips may be included. (A, CSU)

12 DIGITAL LOGIC DESIGN
4 units, 3 lecture hours, 3 lab hours
COREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.
Introductory course in the fundamentals of designing digital computer hardware. Course covers: logic gates, binary number system, conversion between number systems, Boolean algebra, Karnaugh maps, combinational logic, digital logic design, flip-flops, programmable logic devices (PLDs), counters, registers, memories, state machines, designing combinational logic and state machines into PLDs, and basic computer architecture. Lab assignments are design oriented. (A, CSU, UC)

ENGINEERING TECHNOLOGY
SEE DRAFTING

ENGLISH (ENGL)

1A READING AND COMPOSITION
4 units, 4 lecture hours
PREREQUISITE: English 125 or English for Multi-Lingual Students 167W and English 126 or English for Multi-Lingual Students 168R or English for Multi-Lingual Students 180RW or placement by multiple measures.
Reading, analyzing, and writing college-level prose, with emphasis on the expository; studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). (C-ID ENGL 100) (A, CSU-GE, UC, I)
1AH HONORS READING AND COMPOSITION
4 units, 4 lecture hours, (Formerly Honors 1E)
PREREQUISITE: A "pass" grade in English 125 or English for Multi-Lingual Students 167W and English 126 or English for Multi-Lingual Students 168R or appropriate score on reading and writing sections of the Placement Test. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading, analyzing, and writing college-level prose, with emphasis on the expository: studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). Honors sections may cover additional subject matter such as creative writing, peer response, the study of oral narrative and its relationship to writing and composing on the computer. (C-ID ENGL 100) (A, CSU-GE, UC, I)

1B INTRODUCTION TO THE STUDY OF LITERATURE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of short stories, novels, poems, and plays. (C-ID ENGL 120) (A, CSU-GE, UC, I)

3 CRITICAL READING & WRITING
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. (C-ID ENGL 105) (A, CSU-GE, UC, I)

3H HONORS CRITICAL READING & WRITING
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. Honors sections may cover additional subject matter, such as more in-depth analytical research, extensive analysis of rhetorical discourse, and the study of how critical reasoning and argument is utilized in content area research and practice. (C-ID ENGL 105) (A, CSU-GE, UC, I)

12 THE BIBLE AS LITERATURE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of the Bible as literature. Reading and critical analysis of the Old and New Testaments. (A, CSU-GE, UC, I)

14 FOLKLORE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of folk literature from around the world in literature, film, and the visual arts, including the cultural and literary roots of folklore and folk literature. (A, CSU-GE, UC, I)

15A CREATIVE WRITING: POETRY
3 units, 3 lecture hours, (Formerly English 15)
PREREQUISITE: English 1A or equivalent.
Analysis and writing of poetry for critical review. (C-ID ENGL 200 = ENGL 15A + 15B) (A, CSU, UC)

15B CREATIVE WRITING: FICTION
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Writing fiction for critical review. (C-ID ENGL 200 = ENGL 15A + 15B) (A, CSU, UC)

15C CREATIVE WRITING: PLAYWRITING
3 units, 3 lecture hours, (See also Theatre Arts 15C)
PREREQUISITE: English 1A or equivalent.
Analysis and writing of plays for critical review. (A, CSU, UC)

15D CREATIVE WRITING: CREATIVE NONFICTION
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Intensive workshop in memoir, lyric essay, and all other forms of creative nonfiction writing; appropriate readings and analyses for critical review. (A, CSU, UC)

17 AFRICAN-AMERICAN LITERATURE
3 units, 3 lecture hours, (See also African-American Studies 17)
PREREQUISITE: English 1A or equivalent.
Reading critical works of African and African-American writers and understanding cultural values and themes as expressed in essays, short stories, novels, poetry, and plays. (A, CSU-GE, UC, I)

20 ASIAN AMERICAN LITERATURE
3 units, 3 lecture hours, (See also Asian-American Studies 20)
PREREQUISITE: English 1A or equivalent.
Survey of Asian American classic and contemporary literature. Reading and writing critical analysis of novels, short stories, poems and plays. (A, CSU, UC)
36 WOMEN’S LITERATURE
3 units, 3 lecture hours, (See also Women’s Studies 36)
PREREQUISITE: English 1A or equivalent.
Survey of literature by women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

40 THEMES IN LITERATURE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Themes, authors, or genres through close readings, contextual approaches, interpretations, and critical evaluations. The subject will vary with the instructors, for example, “Rites of Passage in the American Consciousness,” “The Detective as Hero”; Emily Dickinson, Carlos Fuentes; Popular Literature, Science Fiction. (A, CSU-GE, UC)

42 CLASSIC MYTHS
3 units, 3 lecture hours, (See also Humanities 42)
PREREQUISITE: English 1A or equivalent.
Reading and critical analysis of basic mythic themes in literature, film, and the visual arts. The origin of myths in ritual, their development in western civilization, and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

44A WORLD LITERATURE TO THE RENAISSANCE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of the most enduring fiction, drama, and poetry from classical antiquity to the renaissance. (C-ID ENGL 140) (A, CSU-GE, UC, I)

44B WORLD LITERATURE SINCE THE RENAISSANCE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of the most enduring fiction, drama, and poetry from the neo-classic era to 1950. (C-ID ENGL 145) (A, CSU-GE, UC, I)

45 CONTEMPORARY WORLD LITERATURE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
Contemporary (since 1950) works in world literature in fiction, drama, poetry, biography, and essay. (A, CSU-GE, UC, I)

46A ENGLISH LITERATURE TO 1800
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of British and Irish fiction, poetry, and drama from the earliest writings through 1800. (C-ID ENGL 160) (A, CSU-GE, UC, I)

46B ENGLISH LITERATURE FROM 1800 TO THE PRESENT
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of British and Irish fiction, poetry, and drama of the Romantic, Victorian, and Contemporary periods. (C-ID ENGL 165) (A, CSU-GE, UC, I)

47 INTRODUCTION TO SHAKESPEARE
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
An introduction to the plays and poetry of William Shakespeare, including selections from the tragedies, comedies, histories, and sonnets. (A, CSU-GE, UC, I)

48A INTRODUCTION TO AMERICAN LITERATURE TO 1865
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of short stories, novels, poetry, essays, and plays produced by the diverse canon of American writers of the period. (C-ID ENGL 130) (A, CSU-GE, UC, I)

48B INTRODUCTION TO AMERICAN LITERATURE 1865 TO THE PRESENT
3 units, 3 lecture hours
PREREQUISITE: English 1A or equivalent.
A survey of short stories, novels, poetry, essays, and plays produced by the diverse canon of American writers of the period. (C-ID ENGL 135) (A, CSU-GE, UC, I)

105 GRAMMAR AND PUNCTUATION
3 units, 3 lecture hours, (Formerly English 5)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Elements of basic sentence structure, including appropriate punctuation. (A)
250 WRITING IMPROVEMENT
4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 52)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 250 or 281. Not recommended for students learning English as a second language. Not primarily for students with identified learning disabilities.
Develops rudimentary essay building skills, including paragraph and essay development. Helps students identify and correct extensive grammatical errors. Prepares students for English 125. Students must satisfactorily complete course work to receive credit for the class.

278 READING COMPREHENSION
2.5 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Formerly English 78)
PREREQUISITE: Designated score on English placement test with other relevant criteria or satisfactory completion of English 277. Development of reading skills through vocabulary usage, literal comprehension, and critical comprehension. Development of various strategies for comprehending different types of written material. Prepares students for English 126.

281 GRAMMAR AND SENTENCE WRITING
2.5 units, 2 lecture hours, 2 lab hours, (Pass/No Pass), (Formerly English 81)
PREREQUISITE: Designated score on English placement test with other relevant criteria. Development of a basic understanding of paragraph and essay structures and an understanding that writing is for communication. Identification of possible essay topics and develop an ability to find and correct grammatical errors. Prepares students for English 252 or 282.

300 ACADEMIC LEARNING & LITERACY SKILLS
3 lecture hours, (Pass/No Pass), (Retakes = 3)
PREREQUISITE: None.
Develops academic reading and comprehension strategies in order to retain and apply learned information in college content area courses. Emphasis is on structured note-taking and study skills for expository materials. This course is designed for non-transfer students or for self-placement.
ENGLISH FOR MULTI-LINGUAL STUDENTS
(EMLS)
FORMERLY ENGLISH AS A SECOND LANGUAGE

167W ADVANCED ACADEMIC WRITING AND GRAMMAR
4 units, 4 lecture hours, (Formerly English 54D, English as a Second Language 67 and English for Multi-Lingual Students 67)
PREREQUISITE: Use of language other than English as a primary language. Designated score on the college placement test or completion of English for Multi-Lingual Students 265W with a grade of “C” or better.
At an advanced level, develops students’ skills through the process of writing, revising and editing essays which includes logical development and organization of ideas. Develops analytical and critical thinking skills by reading and responding to model essays. Reinforces grammar skills, and develops study skills for an academic environment. Designed to prepare multi-lingual students and English Language Learners (ELL) for English 1A and content area courses. (A)

168R ADVANCED ACADEMIC READING AND VOCABULARY
4 units, 4 lecture hours, (Formerly English as a Second Language 68 and English for Multi-Lingual Students 68)
PREREQUISITE: Use of language other than English as a primary language. Designated placement based on college placement criteria (see most recent EMLS Department approved Multiple Measures document) or completion of English for Multi-lingual Students 265R with a grade of “C” or better.
At an advanced level, develops students’ skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students’ reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 264R and mainstream courses.

180RW ADVANCED ACADEMIC READING AND WRITING
6 units, 6 lecture hours
PREREQUISITE: English for Multi-Lingual Students 265R and 265W.
This advanced, academic literacy course is designed for multi-lingual students (EMLS, formerly ESL). Students will read various types of college-level in which students will engage with diverse reading materials in order to process knowledge and build schema; they will engage in intentional writing based on source material using an academic format in preparation for English 1A and content area courses. (A)

263R LOW ACADEMIC INTERMEDIATE READING AND VOCABULARY
4 units, 4 lecture, (Pass/No Pass), (Formerly English as a Second Language 63R and 263R)
PREREQUISITE: Use of language other than English. Designated score on college placement test.
Advances students’ skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students’ reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264R and mainstream courses.

263RW LOW-INTERMEDIATE READING AND WRITING
5 units, 5 lecture hours, (Pass/No Pass)
PREREQUISITE: None.
This low-intermediate, academic literacy course is designed for Multi-lingual students (EMLS), in which students will engage with diverse reading materials in order to process knowledge and build schema for intentional academic format writing based on sources in preparation for EMLS 264R, 264W, 364R, 364W and content area courses.

263W LOW ACADEMIC INTERMEDIATE WRITING AND GRAMMAR
4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54A and English as a Second Language 63, 63W and 263W)
PREREQUISITE: Use of language other than English as primary language. Designated score on college placement test.
Develops the process of writing, revising and editing at high-beginning to low-intermediate level. Includes preparation for and composition of paragraphs and appropriate grammar as taught through model paragraphs and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264W.

264LS INTERMEDIATE LISTENING AND SPEAKING
3 units, 3 lecture, (Pass/No Pass)
PREREQUISITE: None.
A listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the intermediate level. This course can be taken concurrently with other English for Multi-Lingual courses.
264R INTERMEDIATE ACADEMIC READING AND VOCABULARY
4 units, 4 lecture, (Pass/No Pass), (Formerly English as a Second Language 64R and 264R)
PREREQUISITE: Use of language other than English as a primary language. Designated placement based on college placement criteria (see most recent EMLS Department approved Multiple Measures document) or completion of English for Multi-Lingual Students 263R with a grade of “C” or better.

At an intermediate level, develops students’ skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students’ reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265R and content area courses.

264W INTERMEDIATE ACADEMIC WRITING AND GRAMMAR
4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54B and English as a Second Language 64, 64W and 264W)
PREREQUISITE: Use of language other than English as primary language. Designated score on college placement test or completion of English for Multi-Lingual Students 263W with a grade of “C” or better.

At the intermediate level, develops the process of writing, revising, and editing. Includes preparation for and composition of paragraphs and short essays. Reinforces grammar skills and develops study skills. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265W and content area courses.

265R HIGH INTERMEDIATE ACADEMIC READING AND VOCABULARY
4 units, 4 lecture hours, (Pass/No Pass), (Formerly English as a Second Language 65R and 265R)
PREREQUISITE: Use of language other than English as a primary language. Designated placement based on college placement criteria (see most recent EMLS Department approved Multiple Measures document) or completion of English for Multi-Lingual Students 264R with a grade of “C” or better.

At a high intermediate level, develops students’ skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students’ reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 168R and content area courses.

265W HIGH INTERMEDIATE ACADEMIC WRITING AND GRAMMAR
4 units, 4 lecture hours, (Pass/No Pass), (Formerly English 54C and English as a Second Language 65, 65W and 265W)
PREREQUISITE: Use of language other than English as a primary language. Designated score on college placement test or completion of English Multi-Lingual Students 264W with a grade of “C” or better.

At the high-intermediate level develops the process of writing, revising, and editing. Includes the preparation for and composition of essays and use of appropriate grammar as taught through model essays and exercises. Develops study skills for an academic environment. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 167W and content area courses.

270 PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION
3 units, 3 lecture hours, (Pass/No Pass)
PREREQUISITE: None.

This course is for EMLS students at the Intermediate to Advanced levels to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.

284RW INTERMEDIATE ACADEMIC READING AND WRITING
5 units, 5 lecture hours, (Pass/No Pass)
PREREQUISITE: English for Multi-Lingual Students 263RW or 363RW or placement by multiple measures. Use of a language other than English.

First semester of the academic reading and writing sequence designed to introduce non-native English speakers to the demands of Academic English. Emphasizes structuring the academic paragraph and developing short academic essays in response to text based prompts. Focuses on developing academic reading, writing, language (i.e. grammar, vocabulary), and critical thinking skills. Designed to prepare multi-lingual students and English language learners for EMLS 285RW, or EMLS 385RW.
285RW HIGH-INTERMEDIATE ACADEMIC READING AND WRITING
5 units, 5 lecture hours, (Pass/No Pass)
PREREQUISITE: English for Multi-Lingual Students 284RW or 384RW or placement by multiple measures. Use of a language other than English.
Second semester of the academic reading and writing sequence designed to introduce non-native English speakers to the demands of Academic English. Emphasizes refining the academic paragraph and structuring the academic essay in response to text-based prompts. Focuses on developing academic reading, writing, language (i.e. grammar, vocabulary), and critical thinking skills. Designed to prepare multi-lingual students and English language learners for EMLS 180.

363R LOW INTERMEDIATE ACADEMIC READING AND VOCABULARY
4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.
Advances students’ skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for mainstream college classes. Improves students’ reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264R or 364R and mainstream courses.

363RW LOW-INTERMEDIATE READING AND WRITING
5 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: None.
This low-intermediate, academic literacy course is designed for Multi-lingual students (EMLS), in which students will engage with diverse reading materials in order to process knowledge and build schema for intentional academic format writing based on sources in preparation for EMLS 264R, 264W, 364R, 364W and content area courses.

363W LOW INTERMEDIATE ACADEMIC WRITING AND GRAMMAR
4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.
Develops the process of writing, revising and editing at high-beginning to low-intermediate level. Includes preparation for and composition of paragraphs and appropriate grammar as taught through model paragraphs and exercises. Designed to prepare students of other languages and English Language Learners (ELL) for English for Multi-Lingual Students 264W or 364W.

364LS INTERMEDIATE LISTENING AND SPEAKING
3 lecture hours, (Repeats = 3), (Pass/No Pass)
PREREQUISITE: None.
A listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the intermediate level. This course can be taken concurrently with other English for Multi-Lingual Students courses.

364R INTERMEDIATE ACADEMIC READING AND VOCABULARY
4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: English for Multi-Lingual Students 263R or 363R. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.
At an intermediate level, develops students’ skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students’ reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265R or 365R and content area courses.

364W INTERMEDIATE ACADEMIC WRITING AND GRAMMAR
4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: English for Multi-Lingual Students 263W or 363W. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.
At the intermediate level, develops the process of writing, revising, and editing. Includes preparation for and composition of paragraphs and short essays. Reinforces grammar skills and develops study skills. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 265W or 365W and content area courses.
365R HIGH INTERMEDIATE ACADEMIC READING AND VOCABULARY
4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: English for Multi-Lingual Students 264R or 364R. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.

At a high intermediate level, develops students’ skills in the areas of vocabulary usage, literal comprehension, critical reading, and cultural inferences as necessary for college content classes. Improves students’ reading skills and trains students to use reading strategies that can be applied to various reading tasks. Emphasizes reading as a problem-solving process. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 168R and content area courses.

365W HIGH INTERMEDIATE ACADEMIC WRITING AND GRAMMAR
4 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: English for Multi-Lingual Students 264W or 364W. Use of language other than English. Designated score on college placement test; department-approved Multiple Measures.

At the intermediate level, develops the process of writing, revising, and editing. Includes preparation for and composition of paragraphs and short essays. Reinforces grammar skills and develops study skills. Designed to prepare multi-lingual students and English Language Learners (ELL) for English for Multi-Lingual Students 167W and content area courses.

370 PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION
3 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: None.

This non-credit course is for EMLS students at the Intermediate to Advanced levels to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.

384RW INTERMEDIATE ACADEMIC READING AND WRITING
5 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: English for Multi-Lingual Students 263RW or 363RW or placement by multiple measures. Use of a language other than English.

First semester of the academic reading and writing sequence designed to introduce non-native speakers to the demands of Academic English. Emphasizes structuring the academic paragraph and developing the academic essay in response to text-based prompts. Focuses on developing academic reading, writing, language (i.e., grammar, vocabulary) and critical thinking skills. Designed to prepare multi-lingual students and English language learners for EMLS 285RW, or EMLS 385RW.

385RW HIGH INTERMEDIATE ACADEMIC READING AND WRITING
5 lecture hours, (Pass/No Pass), (Repeats = 3)
PREREQUISITE: English for Multi-Lingual Students 284RW or 384RW or placement by multiple measures. Use of a language other than English.

Second semester of the academic reading and writing sequence designed to introduce non-native English speakers to the demands of Academic English. Emphasizes refining the academic paragraph and structuring the academic essay in response to text-based prompts. Focuses on developing academic reading, writing, language (i.e., grammar, vocabulary), and critical thinking skills. Designed to prepare multi-lingual students and English Language Learners for EMLS 180RW.

FASHION MERCHANDISING (FM)
FORMERLY RETAILING FASHION

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to fashion merchandising. Collaborative learning objectives established specific to fashion merchandising. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

26 APPAREL AND TEXTILES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to basic textiles; the study of fibers, yarns and fabric identifications, with emphasis on various processes of textile manufacturing, fabric finishes, sustainability/environmental concerns and appropriate end use. This course qualifies for various Fashion Vocational Certificates. (A, CSU)
27 INTRODUCTION TO FASHION MERCHANDISING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Provides students an introduction to the world of fashion merchandising. Includes the history/global perspectives, uniqueness, and opportunities in fashion. Also presents fundamentals of fashion, basic fashion terminology, and an overview of textiles and apparel. (A, CSU)

28 VISUAL MERCHANDISING
3 units, 3 lecture hours, (See also Marketing 17), (Formerly Retailing Fashion 17)
ADVISORY: Eligibility for Retailing 1A and Mathematics 201 recommended.
Modern display techniques, equipment, materials, and analysis of current display methods as they apply to creating a store's image. Laboratory exercises to include planning, executing, and evaluating a variety of displays including signage, cases, windows, and banners. Field trips. (A, CSU)

FILM (FILM)

1 INTRODUCTION TO FILM STUDIES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the study of motion pictures, with emphasis on aesthetics, theory, and methods of critical analysis. Lectures, discussions, and readings are supplemented by screenings of representative movies from around the world, including documentary and experimental films. (A, CSU-GE, UC, I)

2A HISTORY OF CINEMA 1895-1960
3 units, 3 lecture hours, (Formerly Film 1A)
ADVISORY: Eligibility for English 1A recommended.
A survey of international film history from the invention of cinema in the 1890s to 1960, including the development of narrative, documentary, and avant-garde film of the period; the aesthetic, technological, economic, and social factors that shaped this medium; and its impact on diverse societies and cultural values. (A, CSU-GE, UC, I)

2B HISTORY OF CINEMA 1960-PRESENT
3 units, 3 lecture hours, (Formerly Film 1B)
ADVISORY: Eligibility for English 1A recommended.
A survey of international film history from 1960 to the present, including the development of narrative, documentary, and avant-garde film of the period; the aesthetic, technological, economic, and social factors that shape this medium; and its impact on diverse societies and cultural values. (A, CSU-GE, UC, I)

3 FILM AND CULTURE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The relationship between moving images and culture, including the images of race, ethnicity, class, and gender in film; the ways in which ideologies are conveyed through popular movies; and the technological, industrial, and aesthetic factors affecting screen content. Lectures, discussions, and readings are supplemented by screenings of representative films. (A, CSU-GE, UC, I)

5 DIGITAL FILMMAKING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Film 1 or Film 2B recommended.
Introduction to video filmmaking, including scripting, shooting, and editing short digital films. Emphasis on personal and creative expression. (A, CSU, UC)

6 FILM GENRES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Genre study to provide a clear context for appreciating the fundamental components of film as art and as social expression. Investigates the origins, evolution and transformations of various film genres, including film noir, the Western, science-fiction, the musical, horror, war, or the crime film. Covers the formal and thematic conventions of each genre and the genre as a reflection of the social environments that produced them. (A, CSU-GE, UC, I)

7 INTRODUCTION TO SCREENWRITING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the basic techniques for writing for the screen from story concept to completed script. (A, CSU)

FIRE TECHNOLOGY (FIRET)

1 FIRE PROTECTION ORGANIZATION
3 units, 3.27 lecture hours, (Formerly Fire Science 1)
ADVISORY: Eligibility for English 1A recommended.
An introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as a part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions. (C-ID FIRE 100X) (A, CSU)
2 **FIRE PREVENTION TECHNOLOGY**  
3 units, 8.4 lecture hours, (7 weeks),  
(Spring), (Formerly Fire Science 6)  
ADVISORY: Eligibility for English 1A recommended.  
History and philosophy of fire prevention, organization, and  
operation of a fire prevention bureau; use of fire codes; identification  
and correction of fire hazards; the relationship of fire prevention with  
fire safety education; and understanding of detection and suppression  
systems. (C-ID FIRE 110X) (A, CSU)  

3 **FIRE PROTECTION EQUIPMENT AND SYSTEMS**  
3 units, 8.4 lecture hours, (7 weeks),  
(Spring), (Formerly Fire Science 7)  
ADVISORY: Eligibility for English 1A and Mathematics 201  
recommended.  
Features of design and operation of fire detection and alarm sys­  
tems, heat and smoke control systems, special protection and sprinkler  
systems, water supply for fire protection, and portable fire extinguishers.  
(C-ID FIRE 120X) (A, CSU)  

4 **BUILDING CONSTRUCTION FOR FIRE PROTECTION**  
3 units, 3.27 lecture hours, (Spring),  
(Formerly Fire Science 5)  
ADVISORY: Eligibility for English 1A recommended.  
Components of building construction that relate to fire and life  
safety; focus on firefighter safety; elements of construction and design  
of structures are shown to be key factors when inspecting buildings,  
preplanning fire operations, and operating at emergencies. (C-ID FIRE  
130X) (A, CSU)  

5 **FIRE BEHAVIOR AND COMBUSTION**  
3 units, 3.27 lecture hours, (Spring),  
(Formerly Fire Science 3)  
ADVISORY: Eligibility for English 1A recommended.  
Theory and fundamentals of how and why fires start, spread, and  
are controlled; fire chemistry and physics, fire characteristics of materials,  
extinguishing agents and fire control techniques. (C-ID FIRE 140X) (A,  
CSU)  

8 **FIRE HYDRAULICS**  
3 units, 8.4 lecture hours, (7 weeks)  
(Spring), (Formerly Fire Science 8)  
ADVISORY: Eligibility for English 1A and Mathematics 201  
recommended.  
Hydraulic laws and formulas as applied to the fire service,  
including application of formulas and mental calculation to hydraulic  
problems, water supply problems, and underwriter's requirement for  
pumps. Reviews basic mathematics. (A, CSU)  

9 **FIRE FIGHTING PRACTICES**  
3 units, 8.4 lecture hours, (7 weeks),  
(Spring), (Formerly Fire Science 9)  
ADVISORY: Eligibility for English 1A recommended.  
An in-depth analysis of the principles of fire control through  
utilization of personnel, equipment, and extinguishing agents on the fire  
ground; fire fighting strategy and tactics; methods of attack; pre-planning  
fire problems. (A, CSU)  

14 **PRINCIPLES OF FIRE & EMERGENCY SERVICES SAFETY & SURVIVAL**  
3 units, 8.4 lecture hours, (7 weeks)  
ADVISORY: Eligibility for English 1A recommended.  
Basic concepts of occupational health and safety as it relates to  
emergency services organizations; risk evaluation and control procedures  
for emergency and non-emergency situations. (A, CSU)  

23 **COMPANY OFFICER 2A: HUMAN RESOURCE MANAGEMENT FOR COMPANY OFFICERS**  
2 units, 2.34 lecture hours, (Formerly Fire Technology 223)  
PREREQUISITE: Completion of the Fire Fighter II course or  
equivalent.  
This course provides information on the use of human resources  
to accomplish assignments, evaluating member performance, supervis­  
ing personnel, and integrating health and safety plans, policies, and  
procedures into daily activities as well as the emergency scene. (A, CSU)  

24 **COMPANY OFFICER 2B: GENERAL ADMINISTRATIVE FUNCTIONS FOR COMPANY OFFICERS**  
1 unit, 1.12 lecture hours, (Formerly Fire Technology 224)  
PREREQUISITE: Completion of the Fire Fighter II course or  
equivalent.  
This course provides information on general administrative  
functions and the implementation of department policies and procedures  
and addresses conveying the fire department’s role, image, and mission  
to the public. (A, CSU)
25 COMPANY OFFICER 2C: FIRE INSPECTIONS AND INVESTIGATIONS FOR COMPANY OFFICERS
2 units, 2.23 lecture hours, (Formerly Fire Technology 225)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent.
This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. (A, CSU)

26 COMPANY OFFICER 2D: ALL-RISK COMMAND OPERATIONS FOR COMPANY OFFICERS
2 units, 2.23 lecture hours, (Formerly Fire Technology 226)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent.
This course provides information on conducting incident size-up, developing and implementing an initial plan of action involving single and multiunit operations for various types of emergency incidents to mitigate the situation following agency safety procedures, conducting pre-incident planning, and develop and conduct a post-incident analysis. (A, CSU)

27 COMPANY OFFICER 2E: WILDLAND INCIDENT OPERATIONS FOR COMPANY OFFICERS
2 units, 2.23 lecture hours, (Formerly Fire Technology 227)
PREREQUISITE: Completion of the Fire Fighter II course or equivalent. All Risk Command Operations for Company Officers S-290 Intermediate Fire Behavior (classroom delivery only).
This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports. (A, CSU)

29 INTERMEDIATE WILDLAND FIRE BEHAVIOR
2 units, 2.25 lecture hours
ADVISORY: Completion of CalFire or NWCG S-190.
This is a classroom-based skills course designed to prepare the prospective supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. This course may be presented throughout the United States. Fire environment differences are discussed as necessary, and the instructor should stress local conditions. (A, CSU)

30E INCIDENT COMMANDER HAZMAT
0.4 unit, 0.4 lecture hour, 0.15 lab hour
PREREQUISITE: None.
A study of the emergency response to Hazardous Material (Hazmat) incidents with an emphasis on the role of the Incident Commander (IC) as defined by OSHA Hazardous Waste Operations and Emergency Response (Hazwoper) regulations, including basic hazardous materials chemistry, regulations, the tactics and strategy of mitigation, decontamination, and scene management. Upon successful completion, students will receive a certificate in Hazardous Materials IC from the California Specialized Training Institute (CSTI). (A, CSU)

50L INSTRUCTOR I INSTRUCTIONAL METHODOLOGY
2 units, 2.25 lecture hours, (Formerly Fire Technology 150L)
ADVISORY: Eligibility for English 1A recommended.
Skills and knowledge needed for the entry level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction. (A, CSU)

130A BASIC FIRE ACADEMY - PART 1
13 units, 8 lecture hours, 14.4 lab hours
PREREQUISITE: Valid Public Safety First Aid and CPR course as defined by California Health & Safety Code, Section 1797.182. Valid EMT-B National Registry Certification. Initial PT Test (25 push-ups, 35 sit-ups, 15 minute 1.5 mile run). Completion of Fire Technology 1 or equivalent.
Skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications, and the 2008 edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. The seven overarching themes of the California State Fire Fighter I curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, preparedness and maintenance, wildland suppression activities, and hazardous materials/WMD. An intensive physical fitness training program is also part of this course; course is offered on an intensive daytime format or an extended evening and weekend format. (A)
130B BASIC FIRE ACADEMY - PART 2
12.5 units, 8.42 lecture hours, 13.75 lab hours
PREREQUISITE: Successful completion of Fire Technology 130A when taken in tandem without a time separation between courses (Fire Technology 130A and Fire Technology 130B).

This course provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications, and the 2008 edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/WMD. An intensive physical fitness training program is also part of this course; course is offered on an intensive daytime format or an extended evening and weekend format. (A)

131 EMERGENCY MEDICAL TECHNICIAN I
9.5 units, 8 lecture hours, 5.33 lab hours, (Formerly Fire Science and Fire Technology 31)
PREREQUISITE: Possession of a valid CPR card that proves training equivalent to the American Heart Associations’ Guideline 2000 for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the Health Provider level. ADVISORY: Eligibility for English 1A recommended.

Designed to prepare personnel in the fire, life safety, and related fields to render pre-hospital basic life support including, but not limited to, advanced first aid and cardiopulmonary life support for the ill or injured at the scene of an emergency in preparation for transport in accordance with policies and procedures established by the Emergency Medical Services of the Fresno County Health Department. Twenty-four lab hours arranged. (A)

133 EMERGENCY MEDICAL TECHNICIAN – PARAMEDIC – DIDACTIC
22 units, 12.5 lecture hours, 11.5 lab hours, (24 weeks)
PREREQUISITE: Fire Technology 131 or valid Emergency Medical Technician 1 certificate. ADVISORY: Eligibility for English 1A recommended.

Designed to produce qualified and competent EMT – Paramedics educated and trained in all elements of prehospital advanced life support to the acutely ill or injured patients; scope of practice is in accordance with Title 22 of the California Code of Regulations. (A)

134 EMERGENCY MEDICAL TECHNICIAN – PARAMEDIC – CLINICAL
4 units, 1.5 lecture hours, 11.5 lab hours, (15 weeks)
PREREQUISITE: Fire Technology 133. ADVISORY: Eligibility for English 1A recommended.

Conducted in a hospital environment which consists of rotations in various departments including; emergency, surgery, labor and delivery and pediatrics, specialty units and Advanced Cardiac Life Support (ACLS), certification. Designed to produce qualified EMT – Paramedics who are educated and trained in all elements of prehospital advanced life support to the acutely ill or injured patients, scope of practice is in accordance with Title 22 of the California Code of Regulations. (A)

135 EMERGENCY MEDICAL TECHNICIAN – PARAMEDIC – FIELD INTERNSHIP
8.5 units, 32 lab hours, (15 weeks)
PREREQUISITE: Fire Technology 134. ADVISORY: Eligibility for English 1A recommended.

Responds with assigned paramedic preceptors; involved in patient assessment and treatment, designed to produce qualified and competent EMT-Paramedics who are educated and trained in all elements of prehospital advanced life support to the acutely ill or injured patients, in accordance with local protocols and Title 22 of the California Code of Regulations. (A)

150C FIRE MANAGEMENT 1
2 units, 8.4 lecture hours, (5 weeks), (Formerly Fire Science and Fire Technology 50C)
ADVISORY: Eligibility for English 1A recommended.

Management styles of leadership; promoting group cooperation; types of verbal orders; interpreting and implementing policies; methods of dealing with subordinates; duties and responsibilities of rank; line and staff functions; emotional and behavioral characteristics of individuals and working groups; group behavior within the organization; personnel procedures; types of corrective action, personnel interviews, and counseling. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)
150D FIRE COMMAND 1A
2 units, 8.4 lecture hours, (5 weeks),
(Formerly Fire Science and Fire Technology 50D)
ADVISORY: Eligibility for English 1A recommended. Fire Technology 130B or equivalent.
Introduction to the principles of command, an overview of the concepts of command safety and the risk management process, preincident planning considerations, command considerations at structure fire incidents, Company Officer initial actions at an incident including the development of incident priorities, strategy, and tactics, information on the roles and responsibilities of a Company Officer for post-incident actions. Each student will have the opportunity to gain experience in a controlled environment through structure fire incident simulations. (A)

150F FIRE INVESTIGATION 1A
2 units, 8.4 lecture hours, (5 weeks),
(Formerly Fire Science and Fire Technology 50F)
ADVISORY: Eligibility for English 1A recommended.
Basic overview of fire scene investigation; provides information on fire scene indicators to assist in determining the fire origin. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

150G FIRE PREVENTION 1A
2 units, 8.4 lecture hours, (5 weeks),
(Formerly Fire Science and Fire Technology 50G)
ADVISORY: Eligibility for English 1A recommended.
Organization and function of fire prevention; fire and life safety inspections; codes and ordinances relating to the use and storage of flammable, combustible, toxic, reactive, and radioactive materials; engineering and enforcing a solution of a fire hazard; fire extinguisher and fixed systems requirements. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

150H FIRE PREVENTION 1B
2 units, 8.4 lecture hours, (5 weeks),
(Formerly Fire Science and Fire Technology 50H)
PREREQUISITE: Fire Technology 150G.
Relationship of Life Safety Codes and requirements to building construction principles and building occupancy classifications; fire rated construction; fire doors, windows, and shutters; stairwells and smoke proof enclosures; flame spread, smoke production, and interior finish considerations for various occupancies; exiting and egress requirements; basic electrical theory, electrical hazards, and inspection considerations; basic heat, smoke, and flame detection systems; sprinkler and fixed protection systems; municipal/residential alarm systems; fire drills and emergency evacuation procedures; inspection reports and filing techniques; processing of plans and specifications; handling fire prevention complaints. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)

150J FIRE INVESTIGATION 1B
2 units, 8.4 lecture hours, (5 weeks),
(Formerly Fire Technology 50J)
PREREQUISITE: Fire Technology 150F.
The second class in a series of classes designed for career oriented or currently employed fire fighters; develops knowledge and skill in the area of fire investigation; legal codes and regulations governing the laws of evidence, interviews, and court proceedings; laboratory demonstrations. This is one of the California Fire Service Training and Education System classes needed for Fire Investigator I certification. (A)

150K FIRE COMMAND 1C
2 units, 8.4 lecture hours, (5 weeks)
PREREQUISITE: Fire Technology 150D or equivalent.
Provide emergency personnel with information on the three elements of wildland fire behavior including fuel, weather, and topography, elements of the Incident Command System with an emphasis on Incident Action Planning, and duties and responsibilities of the Strike Team leader. I-Zone firefighting as it relates to the communications process, the elements of size-up, and the key components of a report on conditions. One of the California Fire Service Training and Education System classes needed for Fire Officer certification. (A)
150N  INSTRUCTOR II INSTRUCTIONAL DEVELOPMENT
2 units, 8.4 lecture hours, (5 weeks)
PREREQUISITE: Fire Technology 150L
This course provides the skills and knowledge needed for the intermediate level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications and the 2012 edition of NFPA 1403 Standard on Live Fire Training Evolutions. At the end of this course, candidates for Instructor II certification will be able to develop lesson plans and evaluation instruments, teach and deliver instruction, and evaluate and coach other instructors. The Instructor II will also be able to analyze resources and formulate a program budget. (A)

160A  CONFINED SPACE RESCUE TECHNICIAN
1 unit, 0.56 lecture hour, 1.67 lab hours, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course is an intensive hands-on training program that will prepare you to respond to confined space emergencies. This course of instruction prepare the student in identifying confined spaces and permit-required confined spaces, the hazards associated with permit required confined spaces, target industries and hazards, state and federal regulations, components of a rescue operation, and the roles and responsibilities of the rescue team. (A)

160B  RESCUE SYSTEMS 1
0.5 unit, 0.22 lecture hour, 2.01 lab hours, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Key topics include: Team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. (A)

200  ADVANCED COMPANY/CHIEF OFFICER
0.3-2.5 units, 1-8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshal's Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Provide students with concepts and theories of leadership and management. Planning, organizing, and emergency scene management will be discussed. Course curriculum meets the general knowledge requirements for the position of Fire Company Officer and Chief Officer. Course curriculum is based on the general knowledge and skill requirements of the following National Fire Protection Association Standards. 1001 Standard for Professional Firefighter Qualifications, 1021: Standard for Fire Officer Professional Qualifications, 1026: Standard for Incident Management Personnel Professional Qualifications, 1250: Recommended Practice in Fire and Emergency Service Organization Risk Management, 1500: Standard on Occupational Safety and Health Program.
201 ADVANCED APPARATUS DRIVER/OPERATOR
0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.


202 ADVANCED FIREFIGHTER
0.5-3 units, 2-10 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it's limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Course curriculum meets the general knowledge requirements for the position of Firefighter. Course curriculum is based on the general knowledge and skill requirements of the following National Fire Protection Association Standards. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents.
203 ADVANCED EMERGENCY MEDICAL TECHNOLOGIST/EMERGENCY MEDICAL TECHNICIAN – PARAMEDIC

0.5-2 units, 2-6 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

- Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with wildland response and suppression methods; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know its limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Course curriculum provides students with general knowledge first responders to medical emergencies and Emergency Medical Technicians and Emergency Medical Technician/Paramedic.

204 ADVANCED TECHNICAL RESCUE

0.5-2 units, 2-6 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)

PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals' Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

- Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know its limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

For students who have basic technical rescue training. Perishable skills are updated and new rescue techniques are presented.
ADVANCED FIRE PREVENTION/FIRE INVESTIGATION
0.5-2.5 units, 2-8 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshal’s Office 2013 Firefighter 1 curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it’s limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Provides students with the general knowledge for fire investigation and fire prevention. Course curriculum is based on and meets the general requirements and requisite knowledge requirement of National Fire Protection Standards, 921: Guide for Fire and Explosion Investigations, 1033: Standard for Professional Qualifications for Fire Investigator.

222A FIREFIGHTER II PART A
2 units, 1.87 lecture hours, 0.47 lab hour
PREREQUISITE: Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

222B FIREFIGHTER II PART B
3 units, 2.7 lecture hours, 1.79 lab hours
PREREQUISITE: Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications. The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance.

230A FIRE APPARATUS DRIVER OPERATOR 1A
1 unit, 0.88 lecture hour, 1.35 lab hours, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, back, maneuver, and turn a fire apparatus in a variety of conditions; and operate all fixed systems and equipment on a fire apparatus. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course fulfills the requirements for a Class C Firefighter Endorsement.
### 230B Fire Apparatus Driver/Operator 1B
1 unit, 0.89 lecture hour, 1.34 lab hours, (Pass/No Pass)

**PREREQUISITE:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on pumping apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions; producing hand, master, and foam fire streams, relay pump operations; and supplying water to fire sprinkler and standpipe systems. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.

### 230C Fire Apparatus Driver/Operator - Aerial Apparatus
1.5 units, 1.13 lecture hours, 1.1 lab hours, (Pass/No Pass)

**PREREQUISITE:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on aerial apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions on the systems and components unique to an aerial apparatus; maneuvering, positioning, and stabilizing an aerial apparatus; maneuvering, positioning, and lowering the aerial device; and deploying and operating an elevated master stream. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.

### 230D Fire Apparatus Driver/Operator - Water Tender
0.5 unit, 0.36 lecture hour, 1.42 lab hours, (Pass/No Pass)

**PREREQUISITE:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on water tender preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions unique to a water tender; maneuvering and positioning a water tender at a water shuttle fill site; and establishing, maneuvering, and positioning at a water shuttle dumpsite. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.

### 230E Fire Apparatus Driver/Operator - Wildland Fire Apparatus
0.5 unit, 0.25 lecture hour, 1.09 lab hours, (Pass/No Pass)

**PREREQUISITE:** Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides information on preventive maintenance and operation of a wildland fire apparatus. Topics include routine tests, inspections, and servicing functions on the systems and components unique to wildland fire apparatus, and operating a wildland fire apparatus and producing an effective fire stream. This course is based on the 2014 edition of NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications.
233 ADVANCED FIREFIGHTER CONTINUING EDUCATION
0.4-1 unit, 1.34-4.45 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

Prior to beginning this course students shall be familiar with and be able to demonstrate all of the skill and general knowledge requirements of the California State Fire Marshals’ Office 2001 or 2013 Firefighter 1 curriculum or IFSA or PROBOARD Firefighter I curriculum. This curriculum is based on the National Fire Protection Association 1001: Standard for Firefighter Professional Qualifications, National Fire Protection 1051: Standard for Wildland Firefighting Personnel Professional Qualifications and the National Fire Protection Association 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. These skills will not be taught in this course; rather they will be the starting point for advanced training that build upon them. These subject areas are:

Knowledge of Fire Fighter Safety, have the ability to don and doff personal protective ensemble and self-contained breathing apparatus; knowledge of, and familiarity with fire apparatus and operating at an emergency scene; knowledge of, and familiarity with fire department communications equipment; knowledge of, and familiarity with firefighting tools and equipment; knowledge of and familiarity with structural fire suppression methods; knowledge of and familiarity with firefighting apparatus; knowledge of and familiarity with firefighter survival self-rescue techniques as well as downed firefighter rescue techniques; knowledge of and familiarity with passenger vehicle fires and the hazards associated with them; knowledge and familiarity with wildland response and suppression methods, have the ability to don and doff wildland personal protective equipment and know it’s limitations; knowledge and familiarity with Hazardous Materials and Weapons of Mass Destruction Incidents.

Satisfies annual mandatory continuing education requirements of local Fire Agencies, Fresno County Health Department, the California State Fire Marshals Office, and appropriate sections of the California Code of Regulations; may be offered in seminar, lecture, and/or lab format; specific course deliver method to be determined by each respective agency.

240A FIRE INSPECTOR 1A
1 unit, 0.93 lecture hour, 0.41 lab hours, (Pass/No Pass)
PREREQUISITE: Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of the roles and responsibilities of a Fire Inspector I including legal responsibilities and authority, codes and standards, the inspection process, confidentiality and privacy requirements, and ethical conduct, and administrative tasks including preparing inspection reports, recognizing the need for a permit or plan review, investigating common complaints, and participating in legal proceedings.

240B FIRE INSPECTOR 1B
1 unit, 1.2 lecture hours, 0.14 lab hours, (Pass/No Pass)
PREREQUISITE: Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector I including building construction, occupancy classifications, occupancy load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures.

240C FIRE INSPECTOR 1C
1 unit, 1.34 lecture hours, (Pass/No Pass)
PREREQUISITE: Successful completion of a California State Fire Marshal’s Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.

This course provides students with a basic knowledge of field inspection roles and responsibilities of a Fire Inspector I including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers.
240D FIRE INSPECTOR 1D
0.5 unit, 0.89 lecture hour, (Pass/No Pass)
PREREQUISITE: Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.
This course provides students with a basic knowledge of a Fire Inspector's field inspection roles and responsibilities specific to California including tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments.

260A CHIEF FIRE OFFICER 3A
1 unit, 0.85 lecture hour, 0.6 lab hour, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B, 223, 224, 225, 226, and 227. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.
This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of a Chief Fire Officer including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program.

260B CHIEF FIRE OFFICER 3B
0.5 unit, 0.5 lecture hour, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B, 223, 224, 225, 226, and 227. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.
This course provides students with a basic knowledge of the budgeting requirements related to the roles and responsibilities of a Chief Fire Officer including developing a budget management system, developing a division or departmental budget, and describing the process for ensuring competitive bidding.

260C CHIEF FIRE OFFICER 3C
1 unit, 0.84 lecture hour, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B, 223, 224, 225, 226, and 227. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.
This course provides students with a basic knowledge of the administration requirements related to the roles and responsibilities of a Chief Fire Officer including directing a department record management system, analyzing and interpreting records and data, developing a model plan for continuous organizational improvement, developing a plan to facilitate approval, preparing community awareness programs, and evaluating the inspection program of the AHJ.

260D CHIEF FIRE OFFICER 3D
0.5 unit, 0.82 lecture hour, 0.52 lab hour, (Pass/No Pass)
PREREQUISITE: Fire Technology 130B. Successful completion of a California State Fire Marshal's Office Accredited Firefighter 1 Academy or equivalent as determined by the Division Dean, Director or their representative. Note: Approval of equivalency training approval is not a guarantee of state regulatory or licensing agencies will also grant equivalency.
This course provides students with a basic knowledge of the emergency service requirements related to the roles and responsibilities of a Chief Fire Officer including developing a plan for the integration of fire services resources, developing an agency resource contingency plan, evaluating incident facilities, supervising multiple resources, developing and utilizing an incident action plan, obtaining incident information to facilitate transfer of command, developing and conducting a post-incident analysis, and maintaining incident records.

261 EMERGENCY MEDICAL TECHNICIAN 1
REFRESHER
1 unit, 1.33 lecture hours, (Open Entry/Open Exit), (Formerly Fire Science 61 and Fire Technology 61)
PREREQUISITE: Valid Emergency Medical Technician 1 course completion certificate.
A review of the topics covered in Fire Technology 131, changes in emergency medical protocol, and updates on new procedures authorized for use in the field. Meets the requirements for recertification as an EMT 1 that are set forth by the State of California and Fresno County.
265 I-300, INTERMEDIATE ICS
1 unit, 1.34 lecture hours, (Pass/No Pass)
PREREQUISITE: Possession of a I-200 Basic ICS certificate.
ICS fundamentals review, incident/event assessment and agency
guidance in establishing incident objectives; unified command; incident
resource management; the planning process; demobilization; transfer
of command; close out. One of the California Fire Service Training and
Education System classes needed for Fire Officer certification.

269 ADVANCED FIREFIGHTER TOPICS
0.1-2 units, 1-40 lecture hours, 1-60 lab
hours, (1-18 weeks), (Pass/No Pass), (Open
Entry/Open Exit)
PREREQUISITE: Currently employed by a fire agency.
Satisfies mandatory yearly requirements of the local fire agency,
Fresno County Health Department, the California State Fire Marshal's
Office, and appropriate sections of the California Code of Regulations;
may be offered in seminar, lecture, and/or lab format; course content to
be determined by the respective agencies.

FOOD AND NUTRITION (FN)

1 PRINCIPLES OF FOOD PREPARATION
3 units, 2 lecture hours, 3 lab hours,
(Formerly Home Economics 1)
ADVISORY: Eligibility for English 1A recommended. A working
knowledge of basic arithmetic is recommended.
Application of food science principles with emphasis on ingre­
dient function and interaction, food preparation techniques, sensory
evaluation standards, food safety and sanitation, and nutrient composition
of food. (C-ID NUTR 120) (A, CSU)

2 ADVANCED FOOD PREPARATION
3 units, 1.5 lecture hours, 4.5 lab hours
PREREQUISITE: Food and Nutrition 1.
Advanced food preparation techniques. Emphasizes proper food
handling, sanitation, plating, and balance in menus. (A, CSU)

35 NUTRITION AND HEALTH
3 units, 3 lecture hours, (Formerly Home
Economics 60)
ANTI-REQUISITE: Food and Nutrition 40. If Food and Nutrition 40
has been taken for credit, Food and Nutrition 35 cannot be taken. Subjects
are too similar. ADVISORY: Eligibility for English 1A recommended.
Relationship of diet to physical and emotional health; nutrients;
diet patterns throughout the life cycle. Optimal nutrition to reduce the
risks of cancer, heart disease, allergies, and other diseases. Social,
psychological, and cultural dictates which affect food selection and
health. Personal strategies to develop a nutrition plan for better health.
Not open to students with credit in FN 40. (A, CSU-GE, UC)

40 NUTRITION
3 units, 3 lecture hours, (Formerly Home
Economics 40)
ADVISORY: Eligibility for English 1A recommended.
Nutrients and their ingestion, digestion, absorption, transport,
metabolism, interaction, storage, and excretion. The relationship of diet
to physical and emotional health, diet patterns through the life cycle,
consumer concern, and recent developments. (C-ID NUTR 110) (A,
CSU-GE, UC)

41 SPORTS NUTRITION
2 units, 2 lecture hours, (Formerly Home
Economics 41)
ADVISORY: Eligibility for English 1A recommended.
Effect of diet on physical performance. Planning diets to meet
needs of those involved in sports and others interested in physical fit­
ness activities. Current trends are explored. Recommended for physical
education and allied health majors and individuals interested in the study
of nutrition as part of their personal fitness program. (A, CSU)

42 CHILD NUTRITION
3 units, 3 lecture hours, (See also Child
Development 42), (Formerly Home
Economics 42)
ADVISORY: Food and Nutrition 40 and eligibility for English 1A
recommended.
Nutritional requirements of infants and children from concep­
tion through adolescence. Nutritional needs of pregnant and lactating
women. Feeding infants and children for optimum physical and mental
development. Child and maternal nutrition programs. Social and cultural
influences affecting child and maternal nutrition. (A, CSU)

43 WOMEN'S NUTRITION
2 units, 2 lecture hours, (See also Women's
Studies 43), (Formerly Home Economics 43)
ADVISORY: Eligibility for English 1A recommended.
The relationship between nutrition and various contemporary
health issues affecting women. Significance of nutrition as it relates
to the health of women during specific stages of the life cycle. Current
trends and research. (A, CSU)

45 THERAPEUTIC DIETS
3 units, 3 lecture hours, (Formerly Home
Economics 5)
PREREQUISITE: Food and Nutrition 40. ADVISORY: Food Service
Management 19. Eligibility for English 1A recommended.
Nutrition care in disease and abnormal metabolic states; therape­
utic diets and patient care; nutritional screening techniques. (A, CSU)
FOOD SERVICE MANAGEMENT (FSM)
FORMERLY DIETETIC SERVICE AND FOOD SERVICES

11 FOOD SERVICE SUPERVISION
2 units, 2 lecture hours, (Formerly Dietetic Services 11)
ADVISORY: Eligibility for English 1A and concurrent enrollment in Food Service Management 19 recommended.

Current methods of supervision and leadership which are applicable to the food service industry. Methods and techniques of recruitment, selection, training and evaluation of personnel. Record maintenance, enforcement of safety and sanitary standards and supervision of food service employees. (A, CSU)

15 FOOD PRODUCTION MANAGEMENT
2 units, 2 lecture hours, (Formerly Dietetic Services 15)
ADVISORY: Food Service Management 19 and 35. Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

Effective management of time, staff, equipment in quantity food preparation; supervisor responsibilities. Standards and criteria, menu planning, and systems of productions. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to food service management. Collaborative learning objectives established specific to food service management. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester, 16 units total. Orientation hours may be required. (A, CSU)

25 FOOD AND BEVERAGE PURCHASE AND CONTROL
2 units, 2 lecture hours, (Formerly Food Services 66)
ADVISORY: Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

Food purchasing policies and procedures with respect to budget. Basic marketing functions and selection of food products for commercial and institutional food service operations. Emphasis on developing standard purchase specification for various food service operations and on procedures for buying, receiving, storing and inventory management. (A, CSU)

35 FOOD SERVICES, SANITATION, SAFETY AND EQUIPMENT
2 units, 2 lecture hours, (Formerly Dietetic Services 35)
ADVISORY: Eligibility for English 1A recommended.

Food service employees’ role in preventing foodborne illness. Supervisor’s responsibilities in maintaining standards of health and safety. Selection and use of food service equipment for optimum safety and sanitation, and to meet federal, state and local regulations. Exam given for the National Restaurant Association ServSafe certificate. (A, CSU)

38 QUANTITY FOOD PREPARATION
3 units, 1.5 lecture hours, 4.5 lab hours, (Formerly Dietetic Services 58)
PREREQUISITE: Food and Nutrition 1. ADVISORY: Food Service Management 35. Eligibility for English 1A recommended. A working knowledge of basic arithmetic is recommended.

Quantity food preparation with emphasis on recipe standardization, use of equipment and time, application of the principles of sanitation and safety, and the attractive service of food. (A, CSU)

144 PRESENTING SERVICE FOR FOOD SERVICE PROFESSIONALS
2 units, 2 lecture hours, (Formerly Food Service Management 44)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended.

Techniques, attitude, education and demeanor required for successful food service operations. (A)

146 ELEMENTARY FOOD SERVICE COMPUTATION I
1.5 units, 1.5 lecture hours, (Formerly Food Service Management 46)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended. A working knowledge of basic arithmetic is recommended.

Basic math principles used daily in the food service and hospitality industry. Mathematical principles used in commercial food production and the application of these computational skills to food service. Word problems and examples exclusive to food service including the study of recipe conversion and yields, production formulas, weights and measures, the metric system and recipe and food cost analysis. (A)
147 ELEMENTARY FOOD SERVICE COMPUTATION II
1.5 units, 1.5 lecture hours, (Formerly Food Service Management 47)
PREREQUISITE: Food Service Management 146. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended.
Basic math principles used daily in the food service and hospitality industry. Mathematical principles used in commercial food production and the application of these computational skills to food service. Word problems and examples exclusive to food service including the study of recipe conversion and yields, production formulas, weights and measures, the metric system and recipe and food cost analysis. (A)

162 MENU PLANNING FOR CHILD NUTRITION
3 units, 3 lecture hours, (Formerly Food Services 62 and Food Service Management 62)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R or 180RW recommended.
Overview of menu planning for child nutrition programs including menu planning options, nutrition standards, menu writing, student preferences, marketing and evaluation. Procedures for developing standardized products, budgetary controls, and evaluating procurement and delivery systems. Meets Federal, State, and Local Standards. (A)

FOREIGN LANGUAGES

AMERICAN SIGN LANGUAGE (ASL)

1 BEGINNING AMERICAN SIGN LANGUAGE
4 units, 4 lecture hours, (Formerly American Sign Language 1A)
ADVISORY: Eligibility for English 1A recommended.
First-semester American Sign Language as used by Deaf people in America and parts of Canada. An introduction to the basic vocabulary, grammar, and culture of the Deaf community. The students will also be introduced to the literary and artistic contributions of this culture. Designed for students with no knowledge of ASL. (A, CSU-GE, UC, I)

2 HIGH-BEGINNING AMERICAN SIGN LANGUAGE,
4 units, 4 lecture hours, (Formerly American Sign Language 1B)
PREREQUISITE: American Sign Language 1 or two years high school American Sign Language or equivalent. ADVISORY: Eligibility for English 1A recommended.

Second-semester American Sign Language and its usefulness as a means of communication with the deaf and hard of hearing. More in-depth information on the culture of the deaf community and the literary and artistic contribution of this culture. (A, CSU-GE, UC, I)

3 INTERMEDIATE AMERICAN SIGN LANGUAGE
4 units, 4 lecture hours, (Formerly American Sign Language 2A)
PREREQUISITE: American Sign Language 2 or equivalent.
ADVISORY: Eligibility for English 1A recommended.
Third semester American Sign Language and its usefulness as a means of communication with the deaf and hard of hearing. An introduction to the culture of the Deaf community and the literary and artistic contributions of this culture. (A, CSU-GE, UC, I)

4 HIGH-INTERMEDIATE AMERICAN SIGN LANGUAGE
4 units, 4 lecture hours, (Formerly American Sign Language 2B)
PREREQUISITE: American Sign Language 3 or equivalent.
ADVISORY: Eligibility for English 1A recommended.
Fourth semester American Sign Language. A formal method of thinking, organizing, receiving, and sending non-verbal messages in American Sign Language. The cultural context of the Deaf community for which American Sign Language serves as the primary language. (A, CSU-GE, UC, I)

5 DEAF CULTURE
3 units, 3 lecture hours
PREREQUISITE: American Sign Language 2 or equivalent.
ADVISORY: Eligibility for English 1A recommended.
An in-depth study of Deaf culture and the deaf community which will help students understand cultural values, language, identity, rules of interaction, and traditions. (A, CSU-GE)

6 STRUCTURE OF AMERICAN SIGN LANGUAGE
3 units, 3 lecture hours
PREREQUISITE: American Sign Language 3 or equivalent.
ADVISORY: Eligibility for English 1A recommended.
Examination of the parts of a sign; building words in American Sign Language, sentence types (questions, statements, relative clauses, etc.) the meaning and issue of iconicity, and sentence structure (syntax). Other grammatical features of American Sign Language will include, classifiers, verb modulations and aspects, and the role of facial expression, mouth morphemes, body orientation, and eye gaze. (A, CSU, UC)
DEAF HISTORY
3 units, 3 lecture hours
PREREQUISITE: American Sign Language 2 or equivalent.
ADVISORY: Eligibility for English 1A recommended.
An examination of the historical eras impacting Deaf people's lives and the evolution of deaf education and ASL from pathological/cultural views. (A, CSU-GE, UC, I)

AMERICAN SIGN LANGUAGE LITERATURE/FOLKLORE
3 units, 3 lecture hours
PREREQUISITE: American Sign Language 2. ADVISORY: Eligibility for English 1A recommended.
Examination of the values, morals and life experiences of the world around Deaf people. A study of American Sign Language literature that has been passed down from one generation to the next by people of the Deaf culture. (A, CSU-GE, UC, I)

INTRODUCTION TO INTERPRETING
3 units, 3 lecture hours
PREREQUISITE: American Sign Language 2 or equivalent.
ADVISORY: Eligibility for English 1A recommended.
Introduction to the role, communication process, responsibilities and environments in which Sign Language interpreters are involved, as well as the professional licensure and assessment within the profession. (A, CSU)

AMERICAN SIGN LANGUAGE TO ENGLISH TRANSLATION
3 units, 3 lecture hours
PREREQUISITE: American Sign Language 3 or equivalent.
ADVISORY: Eligibility for English 1A recommended.
Introduction to the cognitive processing skills and techniques used to translate American Sign Language to English. (A, CSU, UC)

ENGLISH TO AMERICAN SIGN LANGUAGE TRANSLATION
3 units, 3 lecture hours
PREREQUISITE: American Sign Language 3 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Introduction to the basic translation skills from English to American Sign Language that focus on message analysis, transfer and reformulation without the pressures of simultaneity. (A, CSU, UC)

BEGINNING ARMENIAN
5 units, 5 lecture hours, (Formerly Armenian 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester beginning Armenian listening, speaking, grammar, writing, reading and vocabulary. Designed for students who have no knowledge of Armenian. (A, CSU-GE, UC, I)

HIGH-BEGINNING ARMENIAN
5 units, 5 lecture hours, (Formerly Armenian 1B)
PREREQUISITE: Armenian 1 or two years of high school Armenian or equivalent. ADVISORY: Eligibility for English 1A recommended.
Second semester Armenian listening, speaking, grammar, writing, reading and vocabulary. (Offered infrequently) (A, CSU-GE, UC, I)

BEGINNING CHINESE
5 units, 5 lecture hours, (Formerly Chinese 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester Mandarin Chinese listening/speaking, reading/writing, vocabulary, and grammar. Designed for students who have no knowledge of Chinese. (A, CSU-GE, UC, I)

HIGH-BEGINNING CHINESE
5 units, 5 lecture hours, (Formerly Chinese 1B)
PREREQUISITE: Chinese 1 or two years of high school Chinese or equivalent. ADVISORY: Eligibility for English 1A recommended.
Second semester Mandarin Chinese listening, speaking, grammar, reading, writing, and vocabulary. (A, CSU-GE, UC, I)

BEGINNING FRENCH
5 units, 5 lecture hours, (Formerly French 1A)
ADVISORY: Eligibility for English 1A recommended.
First semester French listening, speaking, grammar, writing, reading, and vocabulary. Designed for students who have no knowledge of French. (A, CSU-GE, UC, I)
2 high-beginning french
5 units, 5 lecture hours, (formerly french 1b)
prerequisite: french 1 or two years of high school french or equivalent. advisory: eligibility for english 1a recommended.
second semester french listening, speaking, grammar, reading, writing, and vocabulary. (a, csu-ge, uc, i)

3 intermediate french
5 units, 5 lecture hours, (formerly french 2a)
prerequisite: french 2 or three years of high school french or equivalent (extensive living experience with the language). advisory: eligibility for english 1a recommended.
third semester french listening, speaking, grammar, reading, writing, and vocabulary. (a, csu-ge, uc, i)

german (german)

1 beginning german
5 units, 5 lecture hours, (formerly german 1a)
advisory: eligibility for english 1a recommended.
first semester german listening, speaking, grammar, writing, reading, and vocabulary. designed for students who have no knowledge of german. (a, csu-ge, uc, i)

2 high-beginning german
5 units, 5 lecture hours, (formerly german 1b)
prerequisite: german 1 or two years of high school german or equivalent. advisory: eligibility for english 1a recommended.
second semester german listening, speaking, grammar, writing, reading, and vocabulary. (a, csu-ge, uc, i)

hmong (hmong)

1 beginning hmong
5 units, 5 lecture hours, (formerly hmong 1a)
advisory: eligibility for english 1a recommended.
first semester hmong listening, speaking, grammar, writing, reading, and vocabulary. designed for students who have no knowledge of hmong. (a, csu-ge, uc, i)

2 high-beginning hmong
5 units, 5 lecture hours, (formerly hmong 1b)
prerequisite: hmong 1 or two years of high school hmong or equivalent. advisory: eligibility for english 1a recommended.
second semester hmong listening, speaking, grammar, reading, writing, and vocabulary. (a, csu-ge, uc, i)

japanese (japan)

1 beginning japanese
5 units, 5 lecture hours, (formerly japanese 1a)
advisory: eligibility for english 1a recommended.
first semester japanese listening, speaking, grammar, writing, reading and vocabulary. designed for students who have no knowledge of japanese. (a, csu-ge, uc, i)

2 high-beginning japanese
5 units, 5 lecture hours, (formerly japanese 1b)
prerequisite: japanese 1 or equivalent. advisory: eligibility for english 1a recommended.
second semester japanese listening, speaking, grammar, writing, reading and vocabulary. (a, csu-ge, uc, i)

portuguese (port)

1 beginning portuguese
5 units, 5 lecture hours
advisory: eligibility for english 1a recommended.
first semester portuguese listening, speaking, grammar, writing, reading, and vocabulary. portuguese and brazilian cultures. designed for students who have no knowledge of portuguese. (a, csu-ge, uc, i)

2 high-beginning portuguese
5 units, 5 lecture hours
prerequisite: portuguese 1, or two years of high school portuguese or equivalent. advisory: eligibility for english 1a recommended.
second semester portuguese listening, speaking, grammar, reading, writing, and vocabulary. portuguese and brazilian culture. (a, csu-ge, uc, i)
Course Descriptions

SPANISH (SPAN)

1  BEGINNING SPANISH
   5 units, 5 lecture hours, (Formerly Spanish 1A)
   ADVISORY: Eligibility for English 1A recommended.
   First semester Spanish listening, speaking, grammar, writing, reading, and vocabulary. Designed for students who have no knowledge of Spanish. Not open to students qualified for or with credit in Spanish 3NS or 4NS. (C-ID SPAN 100) (A, CSU-GE, UC, I)

2  HIGH-BEGINNING SPANISH
   5 units, 5 lecture hours, (Formerly Spanish 1B)
   PREREQUISITE: Spanish 1 or two years of high school Spanish or equivalent. ADVISORY: Eligibility for English 1A recommended.
   Second semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. Not open to students qualified for or with credit in Spanish 3NS or 4NS. (C-ID SPAN 110) (A, CSU-GE, UC, I)

2NS  PREPARATORY SPANISH FOR NATIVE SPEAKERS
   5 units, 5 lecture hours
   ADVISORY: Eligibility for English 1A recommended. Native Spanish speaking proficiency or appropriate high beginning level as assessed by instructor.
   Designed for the student with a basic/heritage life experience using the Spanish language. Development of reading, writing, speaking and listening skills and culture in Spanish. Not open to students with credit in Spanish 2. (A, CSU-GE, UC, I)

3  INTERMEDIATE SPANISH
   5 units, 5 lecture hours, (Formerly Spanish 2A)
   PREREQUISITE: Spanish 2 or three years of high school Spanish or equivalent (Extensive living experience with the language). ADVISORY: Eligibility for English 1A recommended.
   Third semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. (C-ID SPAN 200) (A, CSU-GE, UC, I)

3NS  INTERMEDIATE SPANISH FOR SPANISH SPEAKERS
   5 units, 5 lecture hours, (Formerly Spanish 21)
   PREREQUISITE: Spanish 2NS or Spanish native speaker proficiency, or the equivalent intermediate level as assessed by the instructor. ADVISORY: Eligibility for English 1A recommended.
   Designed for the student with a basic life experience using the Spanish language. Development of correct grammar, correction of speech habits, and improving vocabulary and skills in reading and writing. Hispanic literature and culture. Conducted in Spanish. Not open to students with credit in Spanish 3. (C-ID SPAN 220) (A, CSU-GE, UC, I)

4  HIGH-INTERMEDIATE SPANISH
   5 units, 5 lecture hours, (Formerly Spanish 2B)
   PREREQUISITE: Spanish 3 or 3NS or equivalent (extensive living experience with the language.). ADVISORY: Eligibility for English 1A recommended.
   Fourth semester Spanish listening, speaking, grammar, reading, writing, and vocabulary. (C-ID SPAN 210) (A, CSU-GE, UC, I)

4NS  HIGH-INTERMEDIATE SPANISH FOR SPANISH SPEAKERS
   5 units, 5 lecture hours, (Formerly Spanish 22)
   PREREQUISITE: Spanish 3NS or equivalent or basic speaking knowledge of Spanish. ADVISORY: Eligibility for English 1A recommended.
   Continuation of Spanish 3NS. Designed for the student with a basic life experience using the Spanish language. Development of correct grammar, correction of speech habits, and improving vocabulary and skills in reading and writing. Hispanic literature and culture. Conducted in Spanish. Not open to students with credit in Spanish 4. (C-ID SPAN 230) (A, CSU-GE, UC, I)

5  THE SHORT STORY: MEXICO, SPAIN, AND THE U.S.
   4 units, 4 lecture hours, (Formerly Spanish 3A)
   PREREQUISITE: Spanish 4 or 4NS. ADVISORY: Eligibility for English 1A recommended.
6 THE SHORT STORY: LATIN AMERICA
4 units, 4 lecture hours, (Formerly Spanish 3B)
PREREQUISITE: Spanish 4 or 4NS. ADVISORY: Eligibility for English 1A recommended.
A selection of Hispanic short stories, culture and civilization. Continued development of Spanish language skills in reading, writing, and speaking. Reading and discussing articles and short stories and viewing and discussing films. Includes presentation of oral and written reports. Emphasis on Latin America. (A, CSU-GE, UC, I)

7 ADVANCED SPANISH: COMPOSITION AND GRAMMAR
4 units, 4 lecture hours
PREREQUISITE: Spanish 4 or 4NS. ADVISORY: Eligibility for English 1A recommended.
In depth development of Spanish writing and grammar. Designed for advanced students of Spanish who want to improve their writing skills. (A, CSU-GE, UC, I)

8 ADVANCED SPANISH CONVERSATION
4 units, 4 lecture hours
PREREQUISITE: Spanish 4 or 4NS. ADVISORY: Eligibility for English 1A recommended.
In-depth development of Spanish oral skills. Designed for advanced students of Spanish who want to improve their ability to communicate orally with people in different language situations. (A, CSU, UC)

9 SPANISH BUSINESS AND CULTURE
4 units, 4 lecture hours
PREREQUISITE: Spanish 4 or Spanish 4NS, or equivalent (extensive living experience with the language.). ADVISORY: Eligibility for English 1A recommended; Spanish 7 and Business Administration 10 recommended.
A Spanish business and culture course providing the student with the vocabulary and discourse skills necessary to function effectively in a Spanish speaking commercial environment. The course will develop the student's geographic literacy and cultural understanding of Latin America and will include translation and interpretation activities, cross-cultural communication skills, and case study analysis. (A, CSU-GE, UC)

41 INTRODUCTION TO POETRY IN SPANISH
4 units, 4 lecture hours
PREREQUISITE: Spanish 4 or Spanish 4NS or equivalent (experience using Spanish at home, work or abroad). ADVISORY: Eligibility for English 1A recommended.
Provides the first steps to Spanish metrics, rhyme, and rhythm. It also covers periods of poetry from Medieval Spain to contemporary Spain and Latin America. (A, CSU-GE, UC, I)

42 HISPANIC AMERICAN CULTURE
4 units, 4 lecture hours, (Formerly Spanish 17)
PREREQUISITE: Spanish 4 or 4NS or equivalent (Experience using Spanish at home, work, or abroad). ADVISORY: Eligibility for English 1A recommended.
Study of the most important cultural and political issues in Hispanic American civilization and culture from Columbus to the present day. Chronicles, essays, and public speeches provide the main texts and sources of information for discussion. (A, CSU-GE, UC, I)

FRENCH
SEE FOREIGN LANGUAGES

GEOGRAPHY (GEOG)

1 PHYSICAL GEOGRAPHY
4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
The Earth's dynamic physical systems and processes. Topics include weather, climate, geomorphology, soils, and the biosphere. Emphasis on interrelationships among systems and processes and their resulting patterns and distributions. Tools of geographic inquiry include maps, remote sensing, graphic data, and models. (C-ID GEOG 110) (A, CSU-GE, UC, I)

2 CULTURAL GEOGRAPHY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Survey of basic concepts, theories, and patterns in human and cultural geography. Emphasis is placed on spatial patterns of culture, the interaction between culture and the physical environment, and cultural change. Specific topics may include reading and interpretation of maps, human impacts on the environment, agriculture and food systems, cultural landscapes, urban geography, geography of religion, gender and sexuality, geopolitics, and globalization. (C-ID GEOG 120) (A, CSU-GE, UC, I)

4A WORLD GEOGRAPHY
3 units, 3 lecture hours, (Formerly Geography 4)
ADVISORY: Eligibility for English 1A recommended.
Introductory survey of world regional geography. Emphasis is placed on cultural, economic, political, and physical characteristics of regions, and the influence of geography on population patterns, use of natural resources, and geopolitical relationships amongst countries. Covers Europe, Russia and the Post-Soviet region, Sub-Saharan Africa, North Africa and Southwest Asia, South Asia, Southeast Asia, and East Asia. (C-ID GEOG 125 = GEOG 4A + 4B) (A, CSU-GE, UC, I)
4B WORLD GEOGRAPHY
3 units, 3 lecture hours, (Formerly Geography 5)
ADVISORY: Eligibility for English 1A recommended.
Introductory survey of world regional geography. Emphasis is placed on cultural, economic, political, and physical characteristics of regions, and the influence of geography on population patterns, use of natural resources, and geopolitical relationships amongst countries. Covers North America, the Caribbean, Latin America, Australia and Oceania. (C-ID GEOG 125 = GEOG 4A + 4B) (A, CSU-GE, UC, I)

7 PHYSICAL GEOGRAPHY: EARTH’S SURFACE
4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to Earth’s dynamic physical systems and geomorphic processes, including tectonics, volcanism, orogenesis, denudation, and the interactions between the atmosphere, hydrosphere, lithosphere, and biosphere. Emphasis on understanding interconnections among systems, the resultant spatial patterns, and the relevance of physical geography to environmental issues. Lab includes topographic map interpretation, GIS and remote sensing, rock and mineral ID, and understanding geomorphological processes. (A, CSU-GE, UC, I)

8 PHYSICAL GEOGRAPHY: WEATHER AND CLIMATE
4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to atmospheric processes, energy and moisture exchanges, atmospheric pressure, global atmospheric and oceanic circulation patterns, precipitation processes, weather systems, and severe weather. Analysis of world, regional, and local climate systems, emphasizing an understanding of the mechanisms and consequences of global climate change. Course incorporates lab work focusing on observation and analysis of atmospheric data using charts, meteorological instruments and their use, weather maps, and radar and satellite imagery. (C-ID GEOG 130) (A, CSU-GE, UC, I)

10 INTRODUCTION TO GIS
3 units, 2.5 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended. Computer Information Technology 15 is desirable.
Introduction to the fundamental concepts of Geographic Information Systems (GIS) including familiarization with commonly used GIS software, data sources, organization and input of data, display of spatial data, querying and methods of data analysis, and real-world applications of GIS to problem-solving. (A, CSU, UC)

12 INTRODUCTION TO GLOBAL POSITIONING SYSTEMS (GPS)
1 unit, 1 lecture hour, 0.5 lab hour
ADVISORY: Eligibility for English 1A recommended.
Introductory course in the principles and operation of GPS (Global Positioning Systems). Designed to develop basic competency for a variety of professional or recreational uses. Covers the basic principles, functioning, potential errors and applications of GPS. Use of GPS receivers required. Prepares students for advanced coursework in the GPS or for coursework in Geographic Information Systems. (A, CSU, UC)

18 INTRODUCTION TO REMOTE SENSING
3 units, 2.5 lecture hours, 2 lab hour
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Introduction to remote sensing of the Earth. History and physical principles on which remote sensing is based, sensors and their characteristics, image data sources and image acquisition, classification and interpretation of images, and techniques of analysis. Exploration of practical applications of remote sensing. (A, CSU, UC)

20 GEOGRAPHY OF CALIFORNIA
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Course covers California’s physical, cultural, and regional geography. Content includes geology and geomorphology, climate, vegetation, water resources, and natural hazards in the state; Native American and Spanish settlement; statehood and 19th century settlement; contemporary patterns of population, migration, ethnic diversity, and political and economic geography. (C-ID GEOG 140) (A, CSU-GE, UC, I)

30 REGIONAL FIELD STUDIES
1-6 units, 1-3 lecture hours, 0-9 lab hours,
(Repeats = 3)
ADVISORY: Eligibility for English 1A recommended.
Field study of the geography of selected regions, covering geographical topics. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Content will vary by region and may include current geographical trends and/or issues in the sub-disciplines of Geography, such as environmental issues, biogeography, geomorphology, economic geography, etc. (C-ID GEOG 160) (A, CSU, UC approved as a variable topic; evaluation completed by individual campuses after admission.)
GEOLOGY (GEOL)

1 PHYSICAL GEOLOGY
4 units, 3 lecture hours, 2 lab hours
PREREQUISITE: Mathematics 201. ADVISORY: Eligibility for English 1A recommended.
Introduction to the principles and unifying concepts of earth science including geologic time, formation and internal structure of the Earth, plate tectonics, rock and mineral identification, weathering processes, landforms, earthquakes, volcanic activity, flooding, and groundwater resources. Laboratory exercises will include rock and mineral identification, and interpretation of topographic and geologic maps. Optional fieldtrips to classic geologic locations. (C-ID GEOL 101) (A, CSU-GE, UC, I)

2 HISTORICAL GEOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to Earth's history using geologic dating techniques, plate tectonics, stratigraphy and the processes that have shaped the global environment. Fossil evidence for the origin and evolution of life, natural selection, and environmental change in shaping both ancient and modern living communities are also presented. Emphasis will be given to North American paleogeography and tectonics. Optional field trips. (C-ID GEOL 110) (A, CSU-GE, UC, I)

2L HISTORICAL GEOLOGY LAB
1 unit, 3 lab hours
COREQUISITE: Geology 2.
Laboratory studies to complement Geology 2, Historical Geology. Laboratory activities using rocks, fossils, geologic maps and cross section to interpret ancient environments, tectonic settings and geologic history. At least one field trip or an appropriate alternative activity is required. For geology majors or students with a desire to learn more about earth history. (C-ID GEOL 110L) (A, CSU-GE, UC, I)

3 GEOLOGY FIELD STUDIES
1 unit, 0.5 lecture hour, 1 lab hour, (Pass/No Pass)
PREREQUISITE: Geology 1 or 4 or 9.
Geology field studies of a classic geologic location, such as Death Valley, Eastern Sierra, Lassen, Kings Canyon, San Andreas Fault, etc. Required camping field trips. Additional costs for food, campground, and entrance fee. (A, CSU, UC)

4 GEOLOGY OF CALIFORNIA
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the geologic setting and evolution of California using the concepts of plate tectonics, stratigraphy, and processes that have shaped the landscape. Emphasis on processes that have and are still shaping the landscape, including volcanism, earthquakes, and erosion. Optional field trips. (C-ID GEOL 200) (A, CSU-GE, UC, I)

5 INTRODUCTION TO OCEANOGRAPHY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the study of water on earth with an emphasis on physical oceanography. Topics include ocean and shoreline processes, plate tectonics, sea floor morphology, types and distribution of seafloor sediments, ocean sediment transport, ocean chemistry, ocean currents, marine resources, and environmental concerns. Optional field trips. (A, CSU-GE, UC, I)

6 NATURAL HISTORY OF DINOSAURS
3 units, 3 lecture hours
PREREQUISITE: Biology 3. ADVISORY: Eligibility for English 1A recommended.
Introduction to dinosaurs using the concepts of plate tectonics, evolution, and physiology. Emphasis will be given to fossil morphologies, origin, types, relatives and relationships, modes of life, temporal and spatial distributions, environments, and extinctions. Optional field trips may be offered. (A, CSU-GE, UC, I)

7 GEOLOGY OF MOONS AND PLANETS
3 units, 3 lecture hours
COREQUISITE: Physics 2A. ADVISORY: Eligibility for English 1A recommended.
Introduction to the planets and moons of the solar system using the concepts of geology and physics. Emphasis will be given to planet and moon formation, physical characteristics, chemical composition, and orbital features. Optional field trips to planetariums or museums may be offered. (A, CSU-GE, UC, I)

8 INTRODUCTION TO EARTH SCIENCE
4 units, 3 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the earth sciences with an emphasis on basic topics and principles in geology, oceanography, meteorology, and astronomy. Field trips required. For transfer Liberal Studies students. (C-ID GEOL 121) (A, CSU, UC)
12 ENVIRONMENTAL SCIENCE
3 units, 3 lecture hours, (Formerly Environmental Studies 7)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
The application of scientific principles to the understanding of environmental problems and issues. Seeking solutions to contemporary environmental problems; historical, economical, political and social implications; relationships to scientific principles; ecosystems, urban affairs, housing, land planning, transportation, air and water pollution, water development, food production, wildlife, pest control, and population studies. (A, CSU-GE, UC, I)

GERMAN
SEE FOREIGN LANGUAGES

GLOBAL STUDIES (GLST)

1 INTRODUCTION TO GLOBAL STUDIES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Study of the interconnectedness and interdependence of global processes. Review of the complexity of world societies and issues and related policy dilemmas through an interdisciplinary approach. Special attention given to political, economic, social, historical and cultural patterns that mark globalization processes. Included among explored topics are the environment, migration, human rights, peace, conflict, global trade, and economic linkages. (A, CSU, UC, I)

2 GLOBAL ISSUES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduces origins, current status and future trends of major transnational issues. Focus on global governance and responsibilities. Topics can include population trends, economic development, basic human needs, human rights, international conflict and security and environmental concerns. (A, CSU, UC, I)

GRAPHIC COMMUNICATIONS (GRC)
FORMERLY PRINTING TECHNOLOGY

14 ADOBE ACROBAT PROFESSIONAL
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Adobe Acrobat software and others used for the generation of digital documents for the world wide web, cloud storage, paperless business, distribute and print workflows, or inclusion in media productions. Fulfills computer literacy graduation requirement. (A, CSU)

15 WEB PAGE DESIGN
4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Adobe Brackets or comparable HTML editor, CSS, and components of Adobe Design Suite with emphasis on graphic design principles and digital photography included in exercises and project work. Skill development in recognition of artwork appropriate for web site design. Students capture images, design, create, and post working web sites using Adobe Creative Cloud. Fulfills computer literacy graduation requirement. (A, CSU, UC)

16 WEB DESIGN TECHNIQUES
4 units, 3 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Graphic Communications 15 recommended.
Techniques, tips, tricks and software products to help the web designer. Opportunities to work with new technologies and methods of deploying content over the Internet. Fulfills computer literacy graduation requirement. (A, CSU, UC)

17 ADOBE ILLUSTRATOR
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology 17)
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction. Fulfills computer literacy graduation requirement. (A, CSU)

20A INTRO TO APPLIED GRAPHICS – ADOBE TOOLS
3 units, 2 lecture hours, 3 lab hours,
(Formerly Graphic Communications 20 and Printing Technology 20)
ADVISORY: Eligibility for English 1A recommended.
Overview of graphic communication processes as related to the graphics industry. Terminology, input/output considerations, current trends, and hands-on projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign for production operations. Fulfills computer literacy graduation requirement. (A, CSU)

20B INTRO TO APPLIED GRAPHICS - MEDIA
3 units, 2 lecture hours, 3 lab hours,
(Formerly Graphic Communications 18)
ADVISORY: Eligibility for English 1A recommended.
Introductory production methods of graphic communication systems incorporating print media, web design, and video production. Project work explores considerations and limitations of software for output. Units include professional development for the workplace. Fulfills computer literacy graduation requirement. (A, CSU)
22  DIGITAL MEDIA
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital media. Project work using an assortment of current software. Combine images, audio and video into cross-platform productions. Digital slide shows, image capture, and short video. Fulfills computer literacy graduation requirement. (A, CSU)

23  VIDEO EDITING – ADOBE PREMIERE PRO
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Graphic Communications 20B, 27, 32, 320B, 327, or 332. Eligibility for English 1A recommended.
Digital video editing techniques using Adobe Premiere Pro. Fulfills computer literacy graduation requirement. (A, CSU)

24A  INTRO 2-D ANIMATION WITH ADOBE ANIMATE
3 units, 2 lecture hours, 3 lab hours,
(Formerly Graphic Communications 24)
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Animate to author two-dimensional animation. Design and production of interactive media projects. Fulfills computer literacy graduation requirement. (A, CSU, UC)

24B  INTRO 2-D ANIMATION – HARMONY SOFTWARE
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Use Toon Boom Harmony to author two-dimensional animation. Design and production of interactive media projects. Fulfills computer literacy graduation requirement. (A, CSU)

25  CMS WEB DESIGN
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Design, configuration, and implementation of scalable web sites using a content management system. Fulfills computer literacy graduation requirement. (A, CSU)

27  DIGITAL VIDEO PRODUCTION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital video production with emphasis on editing techniques. Units include planning, storytelling, vocabulary, camera handling, lighting, sound, and working with professional editing software. Students complete short exercises and create video projects. Fulfills computer literacy graduation requirement. (A, CSU, UC)

28  INDEPENDENT STUDY – GRAPHICS
1-3 units, 3-9 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of one of the following courses: Graphic Communications 15, 17, 20, 22, 27 or 30 recommended.
Individual graphic projects designed to allow the student to expand on a specific area of previous study. The production of a pre-employment portfolio with field trips to professional studios, shops, television stations, newspapers or galleries. Fulfills computer literacy graduation requirement. (A, CSU)

30  ADOBE INDESIGN/PROFESSIONAL PUBLISHING
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology 30)
ADVISORY: Eligibility for English 1A recommended.

31  INTERMEDIATE PHOTOSHOP
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications. Fulfills computer literacy graduation requirement. (A, CSU, UC)

32  VIDEO TECHNIQUES
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Production processes and post-production processes with a focus on technical aspects. Lighting, audio, camera work, and color correction. Fulfills computer literacy graduation requirement. (A, CSU, UC)

34  INTRODUCTION TO 3-D ANIMATION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to 3-D animation using Blender software. Projects dealing with workflow, interface, layouts, objects, lighting, animation, and rendering. Fulfills computer literacy graduation requirement. (A, CSU, UC)
Course Descriptions

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Graphic Communications 383

39A INTRODUCTION TO GRAPHIC DESIGN
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology 39 and
Graphic Communications 39)
COREQUISITE: Graphic Communications 20 or permission of
instructor. ADVISORY: Eligibility for English 1A recommended.
Principles and methods of graphic communication. Projects
incorporate symbols and typography into visual design, exploring in­
terrelationships between formal elements and symbolic content. Fulfills
computer literacy graduation requirement. (A, CSU, UC)

40A INTERMEDIATE GRAPHIC DESIGN
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology and Graphic
Communications 40)
PREREQUISITE: Graphic Communications 39A or permission of
instructor. ADVISORY: Eligibility for English 1A recommended.
Advanced principles and methods of graphic communication.
Projects incorporate symbols and typography into visual design, ex­
ploring interrelationships between the formal elements and symbolic
content. Fulfills computer literacy graduation requirement. (A, CSU, UC)

41 VISUAL COMMUNICATIONS
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology 41)
ADVISORY: Eligibility for English 1A recommended.
Survey of the significant techniques and examples of visual
communication as employed by the mass media, including newspapers,
magazines, television, and advertising. Discussion and demonstration of
the tools used in analyzing visual communication. Creation and analysis
of images for print, web, and video. Fulfills computer literacy graduation
requirement. (A, CSU, UC)

47 INTRODUCTION TO FOUR DIMENSIONAL
DESIGN
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Fundamental principles and foundational competencies for digital
artists and designers. (A, CSU, UC)

51 STORYBOARDING
1 unit, 2 lecture hours, (9 weeks)
ADVISORY: Eligibility for English 1A recommended.
Introduction to media-specific storyboarding processes and techniques.
(A, CSU)

52 ADOBE LIGHTROOM
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Production digital image management and adjustment with Adobe
Lightroom. Fulfills computer literacy graduation requirement. (A, CSU)

53 ADOBE AFTER EFFECTS
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to motion graphics and video post-processing
using Adobe After Effects. Projects incorporate a series of techniques
used to create video special effects. Fulfills computer literacy graduation
requirement. (A, CSU)

300A ADOBE ACA CERTIFICATION
0.5-3 lab hours, (Pass/No Pass), (Open
Entry/Open Exit), (Repeats = 3)
ADVISORY: Eligibility for English 1A recommended.
The Adobe Certified Associate coursework provides students an
opportunity to demonstrate proficiency in Adobe digital communication
tools by passing an industry recognized exam. Preparation for the testing
process, environment, and depth of knowledge required to successfully
complete the Adobe Certified Associate exam is presented as well as
opportunities to pretest.

314 ADOBE ACROBAT PROFESSIONAL
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Adobe Acrobat software and others used for the generation of
digital documents for the world wide web, cloud storage, paperless busi­
ness, distribute and print workflows, or inclusion in media productions.

315 WEB PAGE DESIGN
3 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Adobe Brackets or comparable HTML editor, CSS, and compo­
nents of Adobe Design Suite with emphasis on graphic design principles
and digital photography included in exercises and project work. Skill
development in recognition of artwork appropriate for web site design.
Students capture images, design, create, and post working web sites
using Adobe Creative Cloud.
316 WEB DESIGN TECHNIQUES
3 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Techniques, tips, tricks and software products to help the web designer. Opportunities to work with new technologies and methods of deploying content over the Internet.

317 ADOBE ILLUSTRATOR
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction.

320A INTRO TO APPLIED GRAPHICS – ADOBE TOOLS
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Overview of graphic communication processes as related to the graphics industry. Terminology, input/output considerations, current trends, and hands-on projects using Adobe Photoshop, Adobe Illustrator, and Adobe InDesign for production operations.

320B INTRO TO APPLIED GRAPHICS – MEDIA
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introductory production methods of graphic communication systems incorporating print media, web design, and video production. Project work explores considerations and limitations of software for output. Units include professional development for the workplace.

322 DIGITAL MEDIA
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital media. Project work using an assortment of current software. Combine images, audio and video into cross-platform productions. Digital slide shows, image capture, and short video.

323 VIDEO EDITING – ADOBE PREMIERE PRO
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
ADVISORY: Graphic Communications 27, 32, 320B, 327, or 332.
Eligibility for English 1A recommended.
Digital video editing techniques using Adobe Premiere Pro.

324A INTRO TO 2-D ANIMATION WITH ADOBE ANIMATE
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Use Adobe Animate to author two-dimensional animation. Design and production of interactive media projects.

324B INTRO TO 2-D ANIMATION – HARMONY SOFTWARE
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Use Toon Boom Harmony to author two-dimensional animation. Design and production of interactive media projects.

325 CMS WEB DESIGN
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Design, configuration, and implementation of scalable web sites using a content management system.

327 DIGITAL VIDEO PRODUCTION
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introduction to digital video production with emphasis on editing techniques. Units include planning, storytelling, vocabulary, camera handling, lighting, sound, and working with professional editing software. Students complete short exercises and create video projects.

330 ADOBE INDESIGN/PROFESSIONAL PUBLISHING
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.

331 INTERMEDIATE PHOTOSHOP
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications.
332 VIDEO TECHNIQUES
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Production processes and post-production processes with a focus on technical aspects. Lighting, audio, camera work, and color correction.

334 INTRODUCTION TO 3-D ANIMATION
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introduction to 3-D animation using Blender software. Projects dealing with workflow, interface, layouts, objects, lighting, animation, and rendering.

339A INTRODUCTION TO GRAPHIC DESIGN
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between formal elements and symbolic content.

340A INTERMEDIATE GRAPHIC DESIGN
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Advanced principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between the formal elements and symbolic content.

341 VISUAL COMMUNICATION
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Survey of the significant techniques and examples of visual communication as employed by the mass media, including newspapers, magazines, television, and advertising. Discussion and demonstration of the tools used in analyzing visual communication. Creation and analysis of images for print, web, and video.

347 INTRODUCTION TO FOUR DIMENSIONAL DESIGN
3 lecture hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Fundamental principles and foundational competencies for digital artists and designers.

351 STORYBOARDING
2 lecture hours, (9 weeks), (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Pre-visualization for animation, video, web, and game production. Introduction to media-specific storyboarding processes and techniques.

352 ADOBE LIGHTROOM
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Production digital image management and adjustment with Adobe Lightroom.

353 ADOBE AFTER EFFECTS
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Introduction to motion graphics and video post-processing using Adobe After Effects. Projects incorporate a series of techniques used to create video special effects.

GUIDANCE STUDIES
SEE COUNSELING

HEALTH INFORMATION TECHNOLOGY (HIT)
FORMERLY MEDICAL RECORD TECHNOLOGY

1 INTRODUCTION TO HEALTH INFORMATION MANAGEMENT
3 units, 3 lecture hours, (Formerly Medical Record Technology 1)
ADVISORY: Eligibility for English 1A recommended.
Introduction to health care delivery systems, hospital organization, the medical record, the processes of health information management including access, retention, data collection, quantitative and qualitative analysis, and computerized health information systems; accreditation, licensure, and regulatory requirements; the role of the health information management professional. (A, CSU)
2 LEGAL ASPECTS OF HEALTH INFORMATION
3 units, 3 lecture hours, (Formerly Medical Record Technology 2)
COREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.
Legal basis for the control, use, and release of health information; concepts of consent for treatment; HIPAA privacy and security rules; federal and state laws and regulations governing the handling of special health information; ethical practices in health information; procedures used in responding to requests for health information. (A, CSU)

3 QUALITY IMPROVEMENT
2 units, 2 lecture hours, (Formerly Medical Record Technology 3)
PREREQUISITE: Computer Information Technology 15 and Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.
History and development of quality improvement efforts in health care; quality assessment techniques and processes; software tools for data collection and reporting; roles and responsibilities of individuals involved in quality improvement; medical staff organization; peer review, utilization review, and risk management. (A, CSU)

4 DISEASE PROCESS
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 10 and Biology
GENERAL: Eligibility for English 1A recommended.
General principles of pathophysiology; systematic study of symptoms, signs, etiology, course, complications, prognosis and prevention of human disease; the modern practices of diagnosis and treatment. (A, CSU)

5 INTRODUCTION TO CODING
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 10. COREQUISITE: Health Information Technology 4. ADVISORY: Eligibility for English 1A recommended.
Introduction to ICD-10-CM code assignment and ICD 10 PCS; rules, principles, guidelines, and conventions; state and federal regulations; documentation to support coding; manual and electronic coding applications. Review of other systems used in health care: DSM, SNOMED, and ICD-10-CM. This is the first of a two-course sequence for ICD-10-CM and ICD-10-PCS coding. (A, CSU)

6 CODING AND REIMBURSEMENT
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 5. ADVISORY: Eligibility for English 1A recommended.
Advanced ICD-10-CM and ICD-10-PCS code assignment. Emphasis on case studies, health records, encoders and groupers; federal regulations regarding prospective payment systems, and methods of billing and reimbursement. Second of a two-course sequence for ICD-10-CM and ICD-10-PCS coding. (A, CSU)

7 DIRECTED PRACTICE
4 units, 1 lecture hour, 9 lab hours, (Pass/No Pass)
PREREQUISITE: Health Information Technology 3 and 6. ADVISORY: Eligibility for English 1A recommended.
Practical application of advanced principles and practices of health information technology; directed practice combines a supervised field experience performing HIT competencies in an affiliated healthcare organization. (A, CSU)

8 HEALTH INFORMATION MANAGEMENT AND SUPERVISION
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.
Effective management of technical and human factors in health information management: leadership, work design and process improvement, human resources, training and development, strategic and organizational management, financial management, project management, and ethics. (A, CSU)

9 HOSPITAL AND HEALTH STATISTICS
2 units, 2 lecture hours
PREREQUISITE: Computer Information Technology 15 and Health Information Technology 1. ADVISORY: Eligibility for Mathematics 201 recommended.
Basic hospital and health statistics including the sources, definitions, and calculation of common rates and percentages; methods for collection, computation and reporting; analysis of data; common research methodologies used in healthcare. (A, CSU)

10 MEDICAL TERMINOLOGY
3 units, 3 lecture hours, (Formerly Medical Record Technology 10)
ADVISORY: Eligibility for English 1A recommended.
Medical vocabulary with concentration on prefixes, suffixes, and root words. Emphasis on word dissection and definitions as applied to the body systems including the terminology used in examinations, diagnoses, procedures, laboratory investigations, and medical reports. (A, CSU)
11 CPT CODING
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 10. COREQUISITE: Health Information Technology 4. ADVISORY: Eligibility for English 1A recommended.
Common Procedural Terminology (CPT) coding; Healthcare Common Procedure Coding System (HCPCS), and Ambulatory Pay Classification (APCs); emphasis on application of coding conventions and guidelines, application to billing processes and reimbursement issues; use of manual and electronic coding systems. (A, CSU)

12 HEALTH INFORMATION IN ALTERNATIVE SETTINGS
2 units, 2 lecture hours
PREREQUISITE: Health Information Technology 1. ADVISORY: Eligibility for English 1A recommended.
Introduction to non-traditional health information systems and settings including organizational structure, accreditation and licensing requirements, documentation requirements, and the role of the health information practitioner. Emphasis on long-term care, mental health, and ambulatory care settings. (A, CSU)

14 HIM TECHNOLOGY AND SYSTEMS
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 1 and Computer Information Technology 15. ADVISORY: Eligibility for English 1A recommended.
Electronic health records, computer applications, and information systems used in healthcare and health information management; system selection, implementation, and analysis; data quality, storage, retrieval and reporting; privacy and security. (A, CSU)

15 MEDICAL CODING DIRECTED PRACTICE
1 unit, 3 lab hours, (Pass/No Pass)
PREREQUISITE: Health Information Technology 6. COREQUISITE: Health Information Technology 11. ADVISORY: Eligibility for English 1A recommended.
Supervised practice in a healthcare setting or by virtual simulation of diagnostic and procedure coding; demonstration of knowledge in regulatory compliance, revenue cycle, and reimbursement methodologies. (A, CSU)

16 HEALTHCARE REIMBURSEMENT
2 units, 2 lecture hours
PREREQUISITE: Health Information Technology 1. COREQUISITE: Health Information Technology 6. ADVISORY: Eligibility for English 1A recommended.
Functions and history of healthcare payment systems including insurance plans, government healthcare programs, and managed care; fraud and abuse compliance; revenue cycle management including claims processing, electronic submission, and tools for accurate reimbursement. (A, CSU)

HEALTH SCIENCE (HLTH)

1 CONTEMPORARY HEALTH ISSUES
3 units, 3 lecture hours, (Formerly Health Education 1)
ADVISORY: Eligibility for English 1A recommended.
Contemporary scientific concepts and medical information designed to promote health, prevent disease, increase life span and improve the quality of life involving the cardiovascular system, physical fitness, nutrition, emotional health, human sexuality, sexually transmitted diseases, reproduction and birth control, heredity, substance abuse, cancer, consumer and environmental health and health care systems. (A, CSU-GE, UC)

2 FIRST AID AND SAFETY
3 units, 3 lecture hours, (Formerly Health Education 2)
ADVISORY: Eligibility for English 1A recommended.
Basic concepts and skills necessary to give first aid (including cardiopulmonary resuscitation). Satisfies the requirements of the American Red Cross for certification in Adult, Child and Infant Cardiopulmonary Resuscitation and Basic First Aid. (C-ID KIN 101) (A, CSU, UC)

3 CONCEPTS IN HEALTH AND FITNESS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Students learn about the different components of physical fitness, cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition as related to healthy living. (C-ID KIN 101) (A, CSU, UC)

HEATING, VENTILATION, & AIR CONDITIONING (HVAC) - FORMERLY AIR CONDITIONING

50 HVAC INTRODUCTION
2 units, 2 lecture hours, 1 lab hour, (Formerly Air Conditioning 50)
ADVISORY: Applied Technology 10, eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.
In HVAC introduction, students are introduced to basic principles of safety, air conditioning, heating, air distribution and electricity. Students learn theory and application of HVAC technology while practicing HVAC system performance and measurement in the HVAC laboratory. (A, CSU)
51 HVAC COMFORT SYSTEMS
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 51)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 53 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Comfort Systems, students begin building their inventory of HVAC skill-sets. Students learn theory and application of HVAC technology while learning practical skills in the laboratory including safety, cooling and heating systems, electrical distribution, electrical circuitry, test instruments, air distribution, swaging, flaring, soldering and brazing. (A, CSU)

52 HVAC SYSTEM COMPONENTS
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 52)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 54 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Comfort Troubleshooting, students examine HVAC from a component by component perspective, and then how component function affects the HVAC system. Students also assemble an inventory of practical skill-sets relating to safety, alternating current, compressors, refrigerants, oils, leak detection, metering devices, heat pumps, maintenance, furnace venting, sheet metal duct systems, fiberglass duct systems, commercial systems, air quality equipment, and hydronic systems. (A, CSU)

53 HVAC COMFORT TROUBLESHOOTING
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 53)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 51 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Comfort Troubleshooting, students enhance their newfound skills with topics such as safety, fasteners, control circuits, motor, cooling and gas heat, accessories, zoning, VRF systems, hydronics, retail refrigeration, and customer relations. Students also practice skills as they build operating HVAC systems. (A, CSU)

54 HVAC SYSTEM PROCESSES
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 54)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 52 or concurrent enrollment, Applied Technology 10 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC System Processes, students explore commercial building systems and the processes required to build, repair and maintain them. Topics include water treatment, indoor air quality, energy conservation, building management systems, air balancing, startup, shutdown, construction drawings, system design, retail refrigeration, alternative systems, and crew leadership. Students also build electromechanical skills as they design and build custom HVAC circuitry. (A, CSU)

56 HVAC SYSTEM INSTALLATION
2 units, 1 lecture hour, 3 lab hours,
(Formerly Air Conditioning 53 and 56)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 or concurrent enrollment, and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC System Installation, students master HVAC retrofit practices including “tailgate” design and assembly of duct systems, duct testing, condensate drains, electrical connections, gas connections and sheet metal adaptations. Course assignment may also include an off-campus HVAC system installation. (A, CSU)

57 HVAC DIGITAL CONTROL PRINCIPLES
2 units, 2 lecture hours, 1 lab hour,
(Formerly Air Conditioning 57)
ADVISORY: Heating, Ventilation, and Air Conditioning 54 and Applied Technology 10, eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.

In HVAC Digital Control Principles, students learn fundamental principles which drive modern digital HVAC control technology. Students are prepared for understanding of modern control systems, including wireless technology. Students also operate operating digital control systems. (A, CSU)

150 WIRELESS HVAC CONTROLS
2 units, 2 lecture hours, 1 lab hour
ADVISORY: Applied Technology 10, Heating, Ventilation, and Air Conditioning 57, eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R, and Mathematics 201 or Applied Technology 130 recommended.

In Wireless HVAC Controls, students learn advanced digital control theory while practicing wired and wireless HVAC control configuration, programming, and/or commissioning. (A)
History 389

350 RETA/CARO READY – EPA SECTION 608 TECHNICIAN CERTIFICATION
3 lecture hours, (Open Entry/Open Exit)
ADVISORY: Applied Technology 10 and Heating, Ventilation, and Air Conditioning 53. Proficiency in reading and writing in English and knowledge of basic algebra concepts recommended.
This course prepares students and HVACR (Heating, Ventilation, Air Conditioning, and Refrigeration) technicians for EPA (Environmental Protection Agency), Section 608 Technician Certification (Type I, II, III, and/or Universal). EPA Section 608 Refrigerant Certification is a federal certification requirement for any HVAC technician who maintains, repairs, or disposes of equipment that could release ozone depleting refrigerants into the atmosphere. The certification is an integral part of the course and will be conducted by an approved testing organization proctor. Advisory: In addition to normal registration fees, a Section 608 exam fee will be imposed by the certifying organization. Fee payment is the student's responsibility via electronic portal on the day of final exam.

351 RETA/CARO READY – INDUSTRIAL REFRIGERATION I
3 lecture hours, (Open Entry/Open Exit)
ADVISORY: Applied Technology 10 and Heating, Ventilation, and Air Conditioning 53. Proficiency in reading and writing in English and knowledge of basic algebra concepts recommended.
This course prepares students and HVAC technicians for the CARO (Certified Assistant Refrigeration Operator) certification exam by RETA (Refrigeration Engineers and Technicians Association), which is a highly recognized third party certification in the industrial refrigeration industry sector. The operating principles, function, maintenance, repair, and safety of ammonia-based industrial refrigeration systems are explored throughout the coursework, with emphasis on standards set-forth by RETA. Advisories: 1) In addition to normal registration fees, a RETA book exam fee will be imposed by the certifying organization. Fee payment is the student's responsibility via electronic portal on the day of final exam; 2) CARO certification is not included in this course, and must be taken separately through RETA.

HISTORY (HIST)

1 WESTERN CIVILIZATION TO 1648
3 units, 3 lecture hours
ADVISORY: English 1A.
A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European nations in the seventeenth century. (C-ID HIST 170) (A, CSU-GE, UC, I)

1H HONORS WESTERN CIVILIZATION TO 1648
3 units, 3 lecture hours, (Formerly Honors 1H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European nations in the seventeenth century. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 170) (A, CSU-GE, UC, I)

2 WESTERN CIVILIZATION SINCE 1648
3 units, 3 lecture hours
ADVISORY: English 1A.
The philosophical, political, and economic development of the European civilizations and their “offspring” in the New World and elsewhere from the 17th century to the present era. (C-ID HIST 180) (A, CSU-GE, UC, I)

2H HONORS WESTERN CIVILIZATION SINCE 1648
3 units, 3 lecture hours, (Formerly Honors 2H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
The philosophical, political, and economic development of the European civilizations and their “offspring” in the New World and elsewhere from the 17th century to the present era. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 180) (A, CSU-GE, UC, I)

3 HISTORY OF ANCIENT ROME
3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
The history, politics, social life, literature, art, architecture, religion and archaeology of Rome from the foundation of the city to the early Byzantine period. (A, CSU-GE, UC, I)

11 HISTORY OF THE UNITED STATES TO 1877
3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social, and economic development from the colonial period through the Reconstruction Era. (C-ID HIST 130) (A, CSU-GE, UC, I)
12 HISTORY OF THE UNITED STATES SINCE 1877
3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social and economic development since Reconstruction Era; the US as a world power. (C-ID HIST 140) (A, CSU-GE, UC, I)

12H HONORS HISTORY OF THE UNITED STATES SINCE 1877
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Political, social and economic development since the Reconstruction Era; the U. S. as a world power. In addition, honors sections offer more in-depth study of modern U. S. history, critically evaluate controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 140) (A, CSU-GE, UC, I)

15 HISTORY OF THE BRITISH ISLES
3 units, 3 lecture hours
ADVISORY: English 1A.
Political, social, economic, and cultural history of the British Isles from pre-history to the present. (A, CSU-GE, UC, I)

17 HISTORY OF THE MUSLIM WORLD TO 1405
3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
An analytical survey of Islamic history from the life of Muhammad to the Ottoman Empire. Discussion of the political and military aspects of Islam, Islamic science and medicine, and mystical movements within Islam. (A, CSU-GE, UC, I)

18 HISTORY OF ANCIENT GREECE
3 units, 3 lecture hours
ADVISORY: English 1A and History 1.
An intensive survey of Greek history from the Bronze Age to the Hellenistic period. Discussion of the Homeric poems, the development of the polis system in Athens and Sparta, the Persian and Peloponnesian Wars, and Hellenistic science and technology. (A, CSU-GE, UC, I)

20 WORLD HISTORY I, TO 1600
3 units, 3 lecture hours
ADVISORY: English 1A.
Economic, political, and social developments in World Civilization from the emergence of human communities to around 1600. (C-ID HIST 150) (A, CSU-GE, UC, I)

21 UNITED STATES CIVIL WAR
3 units, 3 lecture hours
ADVISORY: English 1A and History 11.
Causes, events, and consequences of the American Civil War. (A, CSU-GE, UC, I)

22 HISTORY OF AMERICAN WOMEN
3 units, 3 lecture hours
ADVISORY: English 1A.
Women in American history: social, political, and economic actions and reactions of American women; racial, ethnic, religious, geographic, and class differences. (A, CSU-GE, UC, I)

23 WORLD HISTORY II, SINCE 1500
3 units, 3 lecture hours
ADVISORY: English 1A.
Economic, political, and social development in world history from around 1500 to the present. (C-ID HIST 160) (A, CSU-GE, UC, I)

25 HISTORY OF RELIGION IN THE UNITED STATES
3 units, 3 lecture hours
ADVISORY: English 1A.
Survey of religion in the United States from the colonial period to the present. (A, CSU-GE, UC, I)

29 HISTORY OF MEXICO, COLONIAL TO CONTEMPORARY PERIOD
3 units, 3 lecture hours, (See also Chicano-Latino Studies 29)
ADVISORY: English 1A.
A social, economic and political survey of Mexican history from the colonial (1521) to the contemporary period. (A, CSU-GE, UC, I)

30 CALIFORNIA HISTORY
3 units, 3 lecture hours
ADVISORY: English 1A.
Growth and development of California politically, economically, and culturally from 1523 to the present, emphasizing the period since statehood. (A, CSU-GE, UC, I)
HISTORIC OF THE AMERICAN CIVIL RIGHTS MOVEMENT
3 units, 3 lecture hours, (See also African-American Studies 34)
ADVISORY: English 1A.
History of the struggle for civil and human rights in American history, focusing on the African American movement. Legal, moral, ethical, religious and humanistic foundations of the Movement. Forms of discrimination, segregation and oppression and various forms of resistance to them. Efforts to protect human and civil rights in the United States. (A, CSU-GE, UC, I)

HMONG
SEE FOREIGN LANGUAGES

HONORS (HONORS)

ANTHROPOLOGY 2H, HONORS CULTURAL ANTHROPOLOGY
3 units, 3 lecture hours, (Formerly Honors 2A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Principles, methods, and concepts of cultural anthropology. The relationship between culture, society, and the individual. A cross-cultural, integrated analysis of human marriage and family, child rearing, personality development, kinship, social institutions, ideology, politics and social control, economics and ecological adaption, language, artistic expression, and cultural change. In addition, the Honors course takes a greater cross-disciplinary perspective, places greater emphasis on the use of anthropology on the understanding of the modern world, and more critically evaluates the methods and theory of anthropology. (C-ID ANTH 120) (A, CSU-GE, UC, I)

ART 5H, HONORS ART HISTORY ANCIENT TO MEDIEVAL
3 units, 3 lecture hours, (Formerly Honors 5A)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
A survey of the Western Art from prehistory to the Medieval period including Neolithic, ancient Near East, Egyptian, Greek, Roman, Islamic, Byzantine, Romanesque and Gothic cultures. Honors section will include additional readings of primary and secondary source material along with oral presentations and class discussions. (C-ID ARTH 110) (A, CSU-GE, UC, I)

ART 6H, HONORS ART HISTORY RENAISSANCE TO MODERN
3 units, 3 lecture hours, (Formerly Honors 6A)
ADVISORY: English 1AH. Meet the qualifications for consideration for acceptance into the Leon S. Peters Honors Program recommended. See Honors Program listing in the college catalog.
A survey of Western Art from the beginning of the Renaissance to the present. Major art styles and movements covered include Renaissance, Baroque, Neo-Classicism, Impressionism, Cubism, Surrealism, etc. Honors sections will include additional readings of primary and secondary source material, class discussions and oral presentations. (C-ID ANTH 120) (A, CSU-GE, UC, I)

BIOLOGY 11AH, HONORS BIOLOGY FOR SCIENCE MAJORS I
5 units, 4 lecture hours, 3 lab hours
PREREQUISITE: Chemistry 1A and Mathematics 103, within the last five years recommended. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
The chemistry of life, the cell, cellular structure, metabolism, photosynthesis, aerobic and anaerobic respiration, mitosis, meiosis, Mendelian genetics, human genetics, molecular biology, biotechnology, and evolution. Intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. Field trips, guest speakers, literature and scientific research, use of technology, and student presentations are included in this honors level course. (C-ID BIOL 190) (A, CSU-GE, UC, I)

BUSINESS ADMINISTRATION 10H, HONORS INTRODUCTION TO BUSINESS
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.
A survey in business providing a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization’s policy and practices within the U.S. Demonstrates how these influences impact the primary areas of business including; organizational structure and design; leadership, human resource management, and organized labor practices; marketing; organizational communication; technology; and entrepreneurship; and legal, accounting, and financial practices; and therefore affect a business’ ability to achieve its organizational goals in the U.S. economic system with enrichment and service learning activities and linkages to a Business Economics Honors colloquium. (C-ID BUS 110) (A, CSU, UC)
COMMUNICATION 8H, HONORS GROUP COMMUNICATION  
3 units, 3 lecture hours  
ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.  
An introduction to group communication as a vehicle for solving problems, reaching decisions, and making recommendations on policy. Students will study and practice the theories, behaviors, and processes of group communication. Honors sections will also focus on a more in-depth analysis of group communication theory and its application. (A, CSU)

ECONOMICS 40H, HONORS INTRODUCTION TO MICROECONOMICS  
3 units, 3 lecture hours, (Formerly Economics 1BH)  
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.  
The "free enterprise" system. Theories of consumer and individual firm behavior. Market structure analysis and comparison. Government programs to assist, regulate, and promote various industries. The American labor movement and international trade. In addition, Honors sections will discuss and analyze the works of historical economic figures. (C-ID ECON 201) (A, CSU-GE, UC, I)

ECONOMICS 50H, HONORS INTRODUCTION TO MACROECONOMICS  
3 units, 3 lecture hours, (Formerly Economics 1AH)  
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog. Eligibility for English 1A recommended.  
An introductory analysis of aggregate economic variables. Topics include: market systems, aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics and economic growth. Honors sections will discuss and analyze the works of historical economic figures. (C-ID ECON 202) (A, CSU-GE, UC, I)

ENGLISH 1AH, HONORS READING AND COMPOSITION  
4 units, 4 lecture hours, (Formerly Honors 1E)  
PREREQUISITE: A "credit" grade in English 125 or English for Multi-Lingual Students 67, and English 126 or English for Multi-Lingual Students 68 or appropriate score on the reading and writing sections of the placement test. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.  
Reading, analyzing, and writing college-level prose, with emphasis on the expository: studying writing as a process; exploring different writing strategies; summarizing, editing, and critiquing; conducting research (gathering, organizing, evaluating, integrating and documenting information). Honors sections may cover additional subject matter such as creative writing, peer response, the study of oral narrative and its relationship to writing and composing on the computer. (C-ID ENGL 100) (A, CSU-GE, UC, I)

ENGLISH 3H, HONORS CRITICAL READING & WRITING  
3 units, 3 lecture hours  
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.  
Developing critical thinking skills in reading and writing beyond English 1A. Reasoning for analysis and argument writing based mainly on non-fiction readings. Honors sections may cover additional subject matter, such as more in-depth analytical research, extensive analysis of rhetorical discourse, and the study of how critical reasoning and argument is utilized in content area research and practice. (C-ID ENGL 105) (A, CSU-GE, UC, I)

HISTORY 1H, HONORS WESTERN CIVILIZATION TO 1648  
3 units, 3 lecture hours, (Formerly Honors 1H)  
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.  
A survey of the political, social, economic, cultural, and intellectual developments of European civilization from its prehistoric antecedents in the Middle East to the rise of modern European Nations in the seventeenth century. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography of the ancient-through-early-modern periods, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 170) (A, CSU-GE-UC, I)
HISTORY 2H, HONORS WESTERN CIVILIZATION SINCE 1648
3 units, 3 lecture hours, (Formerly Honors 2H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
The philosophical, political, and economic development of European civilizations and their "offspring" in the New World and elsewhere from the 17th century to the present era. In addition, Honors sections take a greater cross-disciplinary perspective, critically evaluate issues and controversies in historiography of the early-modern-to-present periods, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 180) (A, CSU-GE, UC, I)

HISTORY 12H, HONORS HISTORY OF THE UNITED STATES SINCE 1877
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Political, social and economic development since the Reconstruction Era; the U. S. as a world power. In addition, honors sections offer more in-depth study of modern U. S. history, critically evaluate controversies in historiography, and place greater emphasis on the use of history in understanding the modern world. (C-ID HIST 140) (A, CSU-GE, UC, I)

HONORS 1A, HONORS SCIENCE COLLOQUIUM: BIOLOGICAL SCIENCE THROUGH SCHOLARLY RESEARCH
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Biology 11AH or English 1AH. See Honors Program listing in college catalog.
Interdisciplinary approach to biological research integrating scientific writing and scholarly presentation methods. Critical topics and concepts beyond content offered in Biology 11A Honors. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

HONORS 1C, HONORS HUMANITIES COLLOQUIUM: HUMANITIES THROUGH THE AGES
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Philosophy 1AH, History 1H or 2H, Art 5H or 6H, or English 1BH or 3H or Humanities 10H or 11H. See Honors Program listing in college catalog.
Interdisciplinary investigation of human creativity and expression as they intersect across the Humanities. Examination of various topics as manifested in literature, poetry, visual arts, performing arts, music and philosophy. (A, CSU, UC)

HONORS 1D, HONORS BUSINESS, ECONOMICS AND ACCOUNTING COLLOQUIUM: THE LOCAL ECONOMY AND AGribusiness
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Accounting 4AH, Economics 40AH or 50H, and Business Administration 10H. See Honors Program listing in college catalog.
Interdisciplinary investigation of aspects of economic theory and business systems and their relationship to economic cycles and general business and accounting practices. Global and national economic, business, and accounting theories are applied to the conditions of agribusiness in the San Joaquin Valley. (A, CSU)

HONORS 1E, HONORS SOCIAL SCIENCE COLLOQUIUM: CONTEMPORARY ISSUES IN SOCIAL SCIENCE
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. Anthropology 2H or Psychology 2H. See Honors Program listing in college catalog.
Interdisciplinary investigation of a contemporary issue in society, culture, and human behavior. Topics studied and researched in relationship to anthropological and psychological theories. (A, CSU)

HONORS 1F, HONORS PHI THETA KAPPA COLLOQUIUM: PHI THETA KAPPA STUDY TOPICS
1 unit, 1 lecture hour
COREQUISITE: Meet the qualifications for acceptance into the Honors Program. See Honors Program listing in college catalog.
Interdisciplinary investigation of the annual study topic of Phi Theta Kappa International Honor Society. Topic determined by the Honors Study Topic Guide and drawn from the humanities, natural sciences and social sciences. (A, CSU)
HUMANITIES 10H, HONORS CLASSICAL HUMANITIES
3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the Greeks through the Renaissance. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

HUMANITIES 11H, HONORS MODERN HUMANITIES
3 units, 3 lecture hours
PREREQUISITE: English 1A. Humanities 10 is not a prerequisite for this course. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.

An integrated study of the art, music, literature, philosophy, and drama of Western civilization from the seventeenth century to the present. Honors sections may cover additional subject matter such as more extensive reading and research as well as additional writing. (A, CSU-GE, UC, I)

LINGUISTICS 10H, HONORS INTRODUCTION TO LANGUAGE
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Examination of the nature of language, its historical development, its structural elements, the stages of language acquisition, and their applications in the world. Emphasis on systematic linguistic analysis of language systems and usage. Honors sections will cover additional subject matter such as cognitive linguistics, forensic linguistics, and computational linguistics. (A, CSU-GE, UC, I)

MATHEMATICS 11H, HONORS ELEMENTARY STATISTICS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration into the Honors Program recommended. See Honors Program listing in the college catalog.

Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, regression and analysis of variance. Honors work challenges students to be more analytical through expanded assignments. (A, CSU-GE)

PHILOSOPHY 1AH, HONORS THEORIES OF KNOWLEDGE AND REALITY
3 units, 3 lecture hours, (Formerly Honors 1P)
PREREQUISITE: English 1A or equivalent. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

An introduction to traditional and contemporary views on the nature of knowledge, truth, and thought; alternative views of God, the universe and human nature. Develops skills in philosophical analysis and logical thinking. Honors sections may also focus on an historical overview or a more in-depth study of a significant branch of philosophy e.g. philosophy of language or philosophy of mind. (C-ID PHIL 100) (A, CSU-GE, UC, I)

PHILOSOPHY 1CH, HONORS ETHICS
3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading and critical analysis of primary sources on moral theory. Examinations of ethical concepts such as good, evil, and moral obligation. Conditions necessary to ethical decision-making—conscience, moral rules, justice, and free will—may also be discussed. Honors sections may also involve a more in-depth study of a significant area of ethics or moral philosopher, and will require additional writing. (C-ID PHIL 120) (A, CSU-GE, UC, I)

PHILOSOPHY 2H, HONORS CRITICAL REASONING AND ANALYTIC WRITING
3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Principles and methods of good reasoning, with an emphasis on deductive logic, including formal techniques of sentential logic. Includes the identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to various areas of study and real world situations. Honors sections may also focus on an historical overview, or a more in-depth study of a significant branch of philosophy, e.g., environmental ethics or philosophy of race. (A, CSU-GE, UC, I)
POLITICAL SCIENCE 2H, HONORS AMERICAN GOVERNMENT
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Analysis of political and judicial institutions and processes, political ideology, political economy, the role of the media, civil rights, California state and local government. Satisfies the U.S. Constitution requirements and the national, state and local government requirements for transfer students. In addition Honors sections investigate in detail the original design of the American political system, including the values imbued in the Constitution, the construction of the federal system, and the legal responsibilities of the major actors, and contrast those features with the current conditions in American politics. Emphasis is given to explaining the differences between the two situations, and requiring students to suggest how access to the present system can be gained and used. (C-ID POLS 110) (A, CSU-GE, UC, I)

PSYCHOLOGY 2H, HONORS GENERAL PSYCHOLOGY
3 units, 3 lecture hours, (Formerly Honors 7P and Psychology 7H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Scientific study of behavior and mental processes. Topics include history, methodology, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, psychopathology and therapy, stress and health, and social and cultural influences. The Honors section of this course places a greater emphasis on understanding the human being as an integrated physiological, social, and psychological organism and further enriches that perspective with data and theories from related disciplines. (C-ID PSY 110) (A, CSU-GE, UC, I)

SOCIOLOGY 1AH, HONORS INTRODUCTION TO SOCIOLOGY
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.
Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social systems, socialization, and self, institutions, stratification, inter/intra-group dynamics, multi-/cross-cultural relations, demography, deviance, collective behavior, social change, and global trends. The Honors section of this course places a greater emphasis on methods of conducting scientific research in the field of Sociology. Additional emphasis is placed on contemporary social issues as explored through supplemental readers or texts. (C-ID SOC 110) (A, CSU-GE, UC, I)
19B WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
PREREQUISITE: Human Services 42 and 43. COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student’s major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to human services. Collaborative learning objectives established specific to human services. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

20 INTRODUCTION TO SOCIAL WELFARE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the social, economic, political, historical and philosophical components in the development of social welfare and social work in western society. Emphasis on knowledge base, value systems, and specific fields of social work practice. (A, CSU, UC)

24 FUNDAMENTALS OF INTERVIEWING AND COUNSELING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Principles of interviewing and counseling, both theory and practice. Focus on specific skills within a human service setting. Analysis of the dynamics between counselor and client. (A, CSU)

25 ASSERTIVENESS TRAINING
2 units, 2 lecture hours, (See also Women’s Studies 25)
ADVISORY: Eligibility for English 1A recommended.
Becoming more effective and creative in expressing oneself in a courteous and dignified manner. Discovering the communication options available in various life situations. (A, CSU)

30 GROUP AND COMMUNITY SOCIAL SERVICES
3 units, 3 lecture hours
COREQUISITE: Human Services 20. ADVISORY: Eligibility for English 1A recommended.
Methods of human services and social work intervention with individual, group, and community; problem analysis and available services. (A, CSU)

40 ALCOHOL AND DRUG ABUSE COUNSELING: LAW AND ETHICS, PREVENTION, EDUCATION, OUTREACH AND REFERRAL
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Classification of drugs, legal solutions, restrictions, community prevention, outreach, screening techniques, intervention and referral, and crisis counseling. (Not open to students with credit in Human Services/Sociology 41.) (A, CSU)

42 INTRODUCTION TO ALCOHOL AND DRUG COUNSELING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The history of alcohol and other mood changing drugs in the U.S.; myths and stereotypes of alcohol use; socio-cultural factors that contribute to the use of drugs; patterns and progression of alcoholism; and the dynamics of treatment. (A, CSU)

43 ALCOHOL AND DRUG ABUSE COUNSELING: CASE MANAGEMENT
3 units 3 lecture hours
PREREQUISITE: Human Services 42. ADVISORY: Eligibility for English 1A recommended.
Elementary techniques in the treatment of alcohol dependency for the individual and the family; student participation in counseling techniques in a group study experience. Bookkeeping, referral, consultation, and follow-up skills. (A, CSU)

44 DRUG USE: PHYSICAL AND PSYCHOLOGICAL EFFECTS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The physical and psychological aspects of drug use, including abuse and addiction, physical and psychological dependencies, physiological effects of commonly used drugs, and treatment and prevention. Not open to students with credit in Human Services 45. (A, CSU)

60 INTRODUCTION TO CHILD WELFARE
3 units, 3 lecture hours, (See also Child Development 60)
ADVISORY: Eligibility for English 1A recommended.
Introduction to the child welfare system. Exploration of the goals of child welfare including safety, a permanent family and well-being of every child. Emphasis on the practice of preventing, remedying, or ameliorating child maltreatment. (A, CSU)
HUMANITIES (HUMAN)

10  CLASSICAL HUMANITIES
    3 units, 3 lecture hours
    PREREQUISITE: Eligibility for English 1A.
    An integrated study of the art, music, literature, philosophy, and
drama of human civilization from the Greeks through the Renaissance.
    (A, CSU-GE, UC, I)

10H HONORS CLASSICAL HUMANITIES
    3 units, 3 lecture hours
    PREREQUISITE: Eligibility for English 1A. ADVISORY: Meet the
    qualifications for consideration for acceptance into the Honors Program
    recommended. See Honors Program listing in the college catalog.
    An integrated study of the art, music, literature, philosophy, and
drama of human civilization from the Greeks through the Renaissance.
    Honors sections may cover additional subject matter such as more ex­
tensive reading and research as well as additional writing. (A, CSU-GE,
    UC, I)

11  MODERN HUMANITIES
    3 units, 3 lecture hours
    PREREQUISITE: Eligibility for English 1A.
    An integrated study of the art, music, literature, philosophy, and
drama of human civilization from the seventeenth century to the
    present. (A, CSU-GE, UC, I)

11H HONORS MODERN HUMANITIES
    3 units, 3 lecture hours
    PREREQUISITE: Eligibility for English 1A. ADVISORY: Meet the
    qualifications for consideration for acceptance into the Honors Program
    recommended. See Honors Program listing in college catalog.
    An integrated study of the art, music, literature, philosophy,
    and drama of human civilization from the seventeenth century to the
    present. Honors sections may cover additional subject matter such as
    more extensive reading and research as well as additional writing. (A,
    CSU-GE, UC, I)

42  CLASSICAL MYTHS
    3 units, 3 lecture hours, (See also
    English 42)
    PREREQUISITE: English 1A or equivalent.
    Reading and critical analysis of basic mythic themes in literature,
    film, and the visual arts. The origin of myths in ritual, their development
    in western civilization, and their ultimate form and continued presence
    in the arts. (A, CSU-GE, UC, I)

INDIVIDUAL STUDY

49  (COURSE TITLE TO BE SELECTED)
    1-3 units, minimum of 54 hours required
    per unit
    PREREQUISITE: To be determined by the faculty.
    Creative or research project leading to a paper, report, con­
    struction, composition or other product. An exploration of a subject
    not normally covered in a regular course. The course name, title and
    content are to be identified by the instructor after consultation with the
    student. A course application form must be completed by the student
    and approved by the instructor and the division dean of instruction. (A,
    CSU, UC approved as variable topics; evaluation completed by individual
    campuses after admission.)

INDUSTRIAL EDUCATION
SEE APPLIED TECHNOLOGY (AT)

INDUSTRIAL TRAINING, CTC (ITCTC)

371  WAREHOUSE & DISTRIBUTION CAREERS
    2 lecture hours, 3 lab hours,
    (Repeats = 3), (Open Entry/Open Exit),
    (Formerly Industrial Training, VTC 71)
    COREQUISITE: Industrial Training CTC 372.
    Forklift and electric pallet jack safety and operation skills nec­
    essary for employment, inventory and warehouse procedures utilizing
    computer based program resulting in logistics certification, basic and
    applied mathematics, basic computer, reading and writing practice,
    warehouse equipment like strapping and manual pallet jack.

372  WAREHOUSE & DISTRIBUTION CAREERS
    2 lecture hours, 3 lab hours, (Repeats = 3),
    (Open Entry/Open Exit)
    COREQUISITE: Industrial Training, CTC 371.
    Provides forklift operation and safety skills necessary for employ­
    ment in warehouse environment. Warehouse inventory and processing
    procedures utilizing computer based related programs, mathematics and
    proper packaging techniques to industry standards.
1 INTRODUCTION TO MASS COMMUNICATION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A survey of major mass mediums and their influence on the artistic and cultural expression of contemporary society. From books through the internet, and from pop culture to advertising, public relations, media law and ethics, a close examination of the historical and technological developments that have shaped the structures and practices of mass media as well as emerging trends in mass communication, audiences, and technologies. Students learn analytical skills to help become critical consumers/developers of media. (C-ID JOUR 100) (A, CSU-GE, UC, I)

2 INTERPRETING CURRENT EVENTS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Discussion and analysis of important national and international events. Readings from newspapers, magazines and on-line news sources on interpreting and evaluating information in light of journalistic objectivity, propaganda, government censorship and the influence of various groups on news gathering. (A, CSU)

3 NEWSWRITING
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
News information gathering and writing for print media. Includes the basics of news writing, methods and practices, interviewing, feature writing, and emphasis on writing against deadlines. Ethical, policy and legal questions confronting reporters, their editors and publishers. (C-ID JOUR 110) (A, CSU)

4 WRITING FOR THE COLLEGE NEWSPAPER
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended and Journalism 3 (can be concurrent) or equivalent.

Writing articles for the school newspaper; writing for other journalism publications on a regular schedule throughout the semester; editing articles for the publications; gathering information from a variety of sources; synthesizing a story; preparing information for dissemination; handling ethical and legal aspects of communication. (C-ID JOUR 130) (A, CSU)

6 MAGAZINE PRODUCTION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. For photographers, demonstrated ability to use a camera. For artists and designers, demonstrated ability in the field of art or graphics.
Introduction to magazine production with emphasis on developing, researching, interviewing and writing non-fiction articles. Includes complete presentation of stories, photos, design and layout. Students will edit and publish a magazine that can be adaptable for on-line publication. (A, CSU)

11A BEGINNING MEDIA WRITING PRACTICUM
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Students practice and refine beginning newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications; focus of study is on basic news, feature and opinion stories. (C-ID JOUR 130) (A, CSU)

11B INTERMEDIATE MEDIA WRITING PRACTICUM
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Journalism 11A.
Students practice and refine intermediate newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications. Focus of study is on specialized and in-depth news, feature and opinion stories. (C-ID JOUR 131) (A, CSU)

11C ADVANCED MEDIA WRITING PRACTICUM
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Journalism 11B.
Students practice and refine advanced newsgathering, reporting, persuasion and writing skills by working as staff members of the college newspaper and other print and online student publications. Focus of study is on investigative and enterprise news stories and series, and related opinion articles. (C-ID JOUR 130 and JOUR 131) (A, CSU)
11D EDITORIAL LEADERSHIP
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Journalism 11C or relevant experience as determined by the instructor.
Producing the Rampage, print and online version; leadership positions on The Rampage and TheRampageOnline.com; and specialized workshops. (C-ID JOUR 130 and JOUR 131) (A, CSU)

12 ONLINE NEWSPAPER STAFF
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Production of online newspaper. Students will get practical experience in writing for an online publication, including multimedia, using digital photography, video and audio clips for story enhancement. The course prepares students for future print and electronic media work. (A, CSU)

13 ADVANCED REPORTING AND WRITING
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Advanced reporting and news gathering techniques; emphasis on interviewing and research skills; investigative, special assignment and online reporting. (C-ID JOUR 210) (A, CSU)

14 MULTIMEDIA REPORTING
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Integrate print and broadcast techniques to produce multimedia pieces for the web and other electronic media. Multimedia storytelling incorporating writing, digital photography, video, audio and automation. (C-ID JOUR 120) (A, CSU)

15 BASIC EDITING FOR JOURNALISTS
3 units, 3 lecture hours
ADVISORY: Journalism 3 or concurrent enrollment, and eligibility for English 1A recommended.
Application of basic language skills to media writing and editing; covers news values and basic news writing and editing; grammar, word use, sentence construction, spelling, punctuation, and principles of effective writing as it applies to journalistic proofreading and copy editing; emphasizes the set of rules for understanding how language works; and communicating clearly, concisely, and coherently. (A, CSU)

16 RACE, GENDER AND THE MEDIA
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A critical examination of the role of media in enabling, facilitating, or challenging the social construction of race and gender in our society. Using a variety of entertainment and news content in print, electronic, and the internet, an appreciation and evaluation of how the media influence everyday notion of race and gender and review the historical roles news and entertainment media have played in creating awareness about the experiences of women and ethnic minorities. (A, CSU-GE, UC, I)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Journalism 11A, 11B, 11C, 11D or 14. Fall and Spring Semesters: Must be enrolled in at least one other course, including occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to journalism. Collaborative learning objectives established specific to journalism. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

LABORATORY ASSISTANT

159 LABORATORY ASSISTANT
1 unit, 3 lab hours
PREREQUISITE: Verification of eligibility by instructor and division dean.
Opportunity to work independently with and assist instructor in subject area. Student must register no later than the third week of a regular semester. (A)

LEARNING ASSISTANCE (LA)

1 TUTOR TRAINING
1 unit, 1 lecture hour, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
Concepts, principles, and methods of one-on-one and group tutoring with supervised practice. Designed for tutors working in college tutorial, math, and English learning centers, and for students employed or desiring future employment as educational or instructional aides or as teachers. (A, CSU)
2A TUTOR TRAINING: LEVEL I
1 unit, 2 lecture hours, 2 lab hours, (9 weeks)
ADVISORY: Eligibility for English 1A recommended.
Introductory course for writing and reading tutors. Designed to
develop peer-tutoring skills for one-on-one sessions with tutees from
varying educational backgrounds. Overview of tutorial theory and effective
practices. Discussion of meta-cognitive activities for tutoring reading
and writing. This course is open for writing tutors working in a tutorial
environment. (A, CSU)

2B TUTOR TRAINING: LEVEL II
1 unit, 2 lecture hours, 2 lab hours, (9 weeks)
PREREQUISITE: Learning Assistance 2A.
This course provides instruction and guided practice in group
tutoring dynamics and social and emotional intelligence with an empha­
sis on developmental reading and writing and English for Multilingual
Students (EMLS). (A, CSU)

3 METHODS AND APPLICATION IN GROUP
INSTRUCTION
1 unit, 2 lecture hours, (9 weeks)
PREREQUISITE: None.
This class explores theories and methods of learning and their
effective application. It will specifically address learning through a mul­
tidisciplinary lens while promoting group interaction and engagement.
All students hired as Extending the Class (ETC) Leaders for the Division
of Library and Student Learning Support Services must complete this
class during their first year of providing support. Enrolled students will
receive instruction regarding the design, implementation, and evaluation
of a collaborative and engaged Supplemental Instruction (SI) learning
environment. Through experiential learning, ETC Leaders will have the
opportunity to develop and strengthen their interpersonal, communication
and critical thinking skills in preparation of furthering their academic and/
or professional careers. (A, CSU)

LIBRARY SKILLS (LIBSKL)

1 INFORMATION COMPETENCY/RESEARCH
SKILLS
1.5 units, 1.5 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to research skills for college students, including
basic concepts of information, its organization, location, evaluation, and
use. (A, CSU)

LIBRARY TECHNOLOGY (LITEC)

51 INTRODUCTION TO LIBRARY SERVICE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores the general organization and governance of various types
of libraries, their mission, roles and materials; library service from past
to present and its role in society; basic duties, ethics and values of the
library paraprofessional. Foundation course for the program leading to
a certificate in library technology. (A, CSU)

52A ORGANIZATION OF INFORMATION
3 units, 3 lecture hours, (Formerly Library
Technology 52)
ADVISORY: Eligibility for English 1A recommended. Library
Technology 51 recommended.
Cataloging of materials using Library of Congress and Dewey
Decimal Classification systems. (A, CSU)

52B COLLECTION MANAGEMENT
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. Library
Technology 51 recommended. Library Technology 52A recommended.
Library technical services, acquisition and processing of mate­
rials, collection maintenance and materials repair. (A, CSU)

54 LITERATURE AND SERVICES FOR YOUTH
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library
Technology 51 recommended.
Library services to children and young adults in the areas of
literature, collection development, information services, programming,
reader’s advisory, reference and information literacy. (A, CSU)

55 LIBRARY PUBLIC SERVICE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library
Technology 51 recommended.
Library services offered to the public, including readers’ advisory,
interlibrary loan, and the circulation of materials. (A, CSU)

56 INFORMATION TECHNOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library
Technology 51 recommended.
Use and management of computers, computer networks, non­
print materials and emerging technologies used in libraries. Educating
the users in their use. (A, CSU)
57  REFERENCE: PRINT AND ONLINE SOURCES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library Technology 51.
Library reference services, research methodologies, standard reference sources, utilization of print, non-print and electronic format sources; reference interview techniques and style; collection development issues related to library reference services. (A, CSU)

61  INFORMATION AND COMPUTER LITERACY
3 units, 3 lecture hours, (Formerly Library Skills 2)
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.
In-depth research skills for college students, including the concept of information, its organization, location, evaluation, and use. General computer/technology concepts, email, and navigating the World Wide Web. (A, CSU)

62  MEDICAL RESOURCES AND LIBRARIES
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.
Supports reference, communications, teamwork, foundations and technology competencies for library support staff. Surveys needs and uses of medical information for personal, corporate or academic use from print and online sources. (A, CSU)

63  LEGAL RESOURCES AND LIBRARIES
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Library Technology 51 recommended.
Use of legal research tools, especially printed and online resources. Provides an overview of the American legal system, the different areas of law, and the different sources of law. (A, CSU)

LINGUISTICS (LING)

10  INTRODUCTION TO LANGUAGE
3 units, 3 lecture hours
PREREQUISITE: None
Examination of the nature of language, its historical development, its structural elements, and the stages of language acquisition. Emphasis on systematic linguistic description of language knowledge and usage. (A, CSU-GE, UC, I)

10H HONORS INTRODUCTION TO LANGUAGE
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Examination of the nature of language, its historical development, its structural elements, the stages of language acquisition, and their applications in the world. Emphasis on systematic linguistic analysis of language systems and usage. Honors sections will cover additional subject matter such as cognitive linguistics, forensic linguistics, and computational linguistics. (A, CSU-GE, UC, I)

11  INTRODUCTION TO LANGUAGE FOR EDUCATORS
3 units, 3 lecture hours
PREREQUISITE: None
Examination of the nature, history, development and acquisition of language and its structural elements. Emphasis on how language is used and learned. Contrastive analysis of English with other commonly spoken languages of the area. Special focus on the relationship between linguistic structure and the development of reading and writing. (A, CSU)

MAINTENANCE MECHANIC (MMCTC)

370  FUNDAMENTALS OF WELDING AND MACHINE SHOP
5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Formerly MMCTC 70)
PREREQUISITE: None.
Basic gas, arc, MIG, TIG (mild steel only). Precision measurement, hand tools, engine lathe, drilling, milling.

371  FUNDAMENTALS OF HYDRAULICS AND PNEUMATICS
5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Formerly MMVTC 71)
PREREQUISITE: None.
Hydraulic and pneumatic principles, pumps, actuators, valves, schematics, operating systems.

372  ELECTRICAL FUNDAMENTALS
5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Open Entry/Open Exit), (Formerly MMVTC 72)
PREREQUISITE: None.
Electrical principles, AC/DC circuits, motors, motor starters, relays, wiring, troubleshooting, schematic reading, test instruments, variable speed drives
MANUFACTURING MECHANIC (MFGMCTC)

351 INTRODUCTION TO MANUFACTURING
0.5 lecture hour, (Pass/No Pass)
PREREQUISITE: None.
Career in manufacturing, local job market, pay scales; basic mechanical skills required throughout the industrial areas; safety and safe working environment will be stressed.

352A TRADE MATHEMATICS
1 lecture hour, (Pass/No Pass)
PREREQUISITE: None.
Industrial technology and trade-related math. The use of metric system of weights and measures, arithmetic application of integers and fractions, along with ruler and caliper readings commonly used in manufacturing trades.

352B PROGRAMMABLE CONTROLLERS
0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)
PREREQUISITE: None.
An introduction to the equipment and peripheral devices used to interface with industrial controlling devices.

352C JOB PREPARATION
1 lecture hour, (Pass/No Pass)
PREREQUISITE: None.
Preparing resumes, portfolios, and improving employment-seeking skills.

352D TECHNICAL REPORT WRITING
1 lecture hour, (Pass/No Pass)
PREREQUISITE: None.
Identify and write various manufacturing types of reports; analyze data, and record data that are associated with production work.

353A FLUID POWER FUNDAMENTALS
0.5 lecture hour, (Pass/No Pass)
PREREQUISITE: None.
Fundamentals of fluid power; physics principles pertaining to fluid power; various differences in hydraulics and pneumatics; characteristics of liquids and gases.

353B PNEUMATIC FUNDAMENTALS
0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)
PREREQUISITE: None.
Theory and application in the operation, service, and function of pneumatic systems including design and application of systems in industrial environments.

353C HYDRAULIC FUNDAMENTALS
0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)
PREREQUISITE: None.
Theory and application in the operation, service, and function of hydraulic systems including design and application of systems in industrial environments.

354A POWER TRANSMISSION
0.5 lecture hour, (Pass/No Pass)
PREREQUISITE: None.
Fundamental concepts of power transmission. Application of gears, belts, chains, and pulleys will be discussed.

354B WELDING FUNDAMENTALS
0.25 lecture hour, 2.25 lab hours, (Pass/No Pass)
PREREQUISITE: None.
Basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, arc welding, and safety within the work environment.

354C ELECTRICAL FUNDAMENTALS
0.25 lecture hours, 2.25 lab hours, (Pass/No Pass)
PREREQUISITE: None.
Fundamentals of electrical theory, AC circuitry, as well as an instruction to motor control.

MARKETING (MKTG)

1 RETAIL SALES AND CUSTOMER SERVICE FUNDAMENTALS
1 unit, 1 lecture hour
PREREQUISITE: None.
Retail sales and customer service fundamentals for entry-level and incumbent workers. (A, CSU)

10 PRINCIPLES OF MARKETING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Utilizing both traditional and contemporary approaches, this course explores marketing's role in creating profitable exchanges including the examination, analysis, reasoning, advocacy, and critique of planning, product development, pricing, distribution, and promotion. Also researches and evaluates how consumer behavior, market research, retailing, and current technologies are used to achieve organizational goals. (A, CSU)
11 SELLING AND SALES MANAGEMENT
3 units, 3 lecture hours, (Spring only)
ADVISORY: Eligibility for English 1A recommended.
Fundamentals of personal selling including the steps in the sales process; communicating and relationship building; creating value, sales management; making sales presentations and negotiating; buyer motivation/resistance; organizing a territory, and time management. Career opportunities in the sales industry and selling occupations. (A, CSU)

12 ADVERTISING AND PROMOTION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores the elements of advertising and sales promotion from an integrated marketing communications perspective. Topics include consumer and market analysis, identification of target market, creative strategy, media selection, campaign evaluation, and career opportunities. (A, CSU)

14 RETAILING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores the basic elements of retailing with an application of marketing concepts. Topics include retail formats, retail strategies, target market analysis, customer relationship management, personnel management, merchandise selection, current technologies, and career opportunities. (A, CSU)

17 VISUAL MERCHANDISING
3 units, 3 lecture hours, (See also Fashion Merchandising 28)
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Modern display techniques, equipment, materials, and analysis of current display methods as they apply to creating a store's image. Laboratory exercises to include planning, executing, and evaluating a variety of displays including signage, cases, windows, and banners. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Offered under specific majors. ADVISORY: Eligibility for English 1A recommended.

Supervised employment extending the classroom based on occupational learning related to marketing. Collaborative learning objectives established specific to marketing. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

21 DIGITAL MARKETING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Examines digital marketing as a strategic business tool. Explores the roles digital commerce and social media play in an integrated marketing campaign. Builds a foundational knowledge of how companies use social media platforms, metrics, trend monitoring, and research to improve brand awareness, customer service, product development, and quality control. (A, CSU)

22 INTRODUCTION TO FASHION MERCHANDISING
3 units, 3 lecture hours, (See also Fashion Merchandising 27)
ADVISORY: Eligibility for English 1A recommended.
Provides students an introduction to the world of fashion merchandising. Includes the history/global perspectives, uniqueness, and opportunities in fashion. Also presents fundamentals of fashion, basic fashion terminology, and an overview of textiles and apparel. (A, CSU)

301 RETAIL SALES AND CUSTOMER SERVICE FUNDAMENTALS
1 lecture hour
PREREQUISITE: None.
Retail sales and customer service fundamentals for entry-level and incumbent workers.

MATHMATICS (MATH)

3A COLLEGE ALGEBRA
4 units, 4 lecture hours
PREREQUISITE: Mathematics 103 or placement by multiple measures.
This is a college level course in algebra for majors in business, science, technology, engineering, and mathematics. Students will study polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; and analytic geometry. (A, CSU-GE)
4A TRIGONOMETRY
4 units, 4 lecture hours, (Formerly Mathematics 4)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended. Mathematics 102 recommended.
Angles, trigonometric and inverse trigonometric functions, right and oblique triangles, graphs, identities, trigonometric equations, vectors, polar coordinates, DeMoivre's Theorem, and applications. (C-ID MATH 851) (A, CSU-GE)

4B PRE-CALCULUS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 4A or equivalent. ADVISORY: Eligibility for English 1A recommended.
Equations and inequities; polynomial, rational, exponential, logarithmic, trigonometric functions; graphing, analytic geometry, and conic sections; vectors; matrices; systems of equations; the binomial theorem, sequences, and series. (C-ID MATH 151) (A, CSU-GE, UC, I)

5A MATHEMATICAL ANALYSIS I
5 units, 5 lecture hours
PREREQUISITE: Mathematics 4B or equivalent. ADVISORY: Eligibility for English 1A recommended.
Introduction to differential and integral calculus, analytical geometry, differentiation and integration of functions, limits continuity, the Fundamental Theorem of Calculus, and applications of differentiation. (C-ID MATH 210 and C-ID MATH 900S = MATH 5A + MATH 5B) (A, CSU-GE, UC, I)

5B MATHEMATICAL ANALYSIS II
4 units, 4 lecture hours
PREREQUISITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 1A recommended.
Applications and techniques of integration including logarithmic, exponential, trigonometric, and transcendental functions; conic sections; infinite series; differential equations; approximations. (C-ID MATH 220 and C-ID MATH 900S = MATH 5A + MATH 5B) (A, CSU-GE, UC, I)

6 MATHEMATICAL ANALYSIS III
4 units, 4 lecture hours
PREREQUISITE: Mathematics 5B or equivalent. ADVISORY: Eligibility for English 1A recommended.
Solid analytic geometry; partial differentiation; integral calculus of multivariable functions; two and three dimensional vectors; vector valued functions; topics in vector calculus including Green's, Divergence, and Stoke's Theorems. (C-ID MATH 230) (A, CSU-GE, UC, I)

7 INTRODUCTION TO DIFFERENTIAL EQUATIONS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 6 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Introduction to ordinary differential equations; solutions by power series, phase planes, and Laplace Transforms; linear algebra, Fourier Series; complex variables. (C-ID MATH 240) (A, CSU-UC)

10A STRUCTURE AND CONCEPTS IN MATHEMATICS I
3 units, 3 lecture hours
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Development of quantitative reasoning skills via in-depth, integrated explorations of topics in mathematics. Topics include real number systems and subsystems. The emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. Designed for elementary credential candidates. (C-ID MATH 120) (A, CSU-GE, UC, I)

10B STRUCTURE AND CONCEPTS IN MATHEMATICS II
3 units, 3 lecture hours
PREREQUISITE: Mathematics 10A and Mathematics 102, or equivalent. ADVISORY: Eligibility for English 1A recommended.
Development of probability, statistics, geometry, measurement, motion geometry, and tessellations. Designed for elementary credential candidates. (A, CSU-GE, UC, I)

11 ELEMENTARY STATISTICS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, regression and analysis of variance. (C-ID MATH 110) (A, CSU-GE, UC, I)

11H HONORS ELEMENTARY STATISTICS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 103. ADVISORY: Meet the qualifications for consideration into the Honors Program recommended. See Honors Program listing in the college catalog.
Descriptive measures, probability, probability distributions, sampling distributions, central limit theorem, one and two sample hypothesis tests, estimation, correlation, regression and analysis of variance. Honors work challenges students to be more analytical through expanded assignments. (A, CSU-GE)
21  **FINITE MATHEMATICS**  
3 units, 3 lecture hours, (Formerly Mathematics 31)  
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.  
Applications of linear, exponential, and logarithmic functions, matrix operations, and inverse matrices. Linear programming techniques, mathematics of finance, probability, and counting theory. Limits, rates of change, and derivatives. (C-ID MATH 130) (A, CSU-GE, UC, I)

26  **ELEMENTARY LINEAR ALGEBRA**  
3 units, 3 lecture hours  
PREREQUISITE: Mathematics 5A or equivalent. ADVISORY: Eligibility for English 1A recommended.  
Matrices and linear transformations, vector spaces, determinants, eigenvalues and eigenvectors. (C-ID MATH 250) (A, CSU-GE, UC, I)

42  **STATISTICS FOR THE BEHAVIORAL SCIENCES**  
4 units, 4 lecture hours, (See also Psychology 42)  
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.  
Descriptive statistics, sampling, hypothesis testing, estimation, selected non-parametric techniques, ANOVA, and regression, with applications from psychology, biology, and social sciences. This course is designed for psychology majors and UC transfers. (C-ID MATH 110) (A, CSU-GE, UC, I)

45  **CONTEMPORARY MATHEMATICS**  
3 units, 3 lecture hours  
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.  
An introduction to mathematical problem solving: statistics, social choice, and management science. (A, CSU-GE, UC)

102  **PLANE GEOMETRY**  
3 units, 3 lecture hours, (Formerly Mathematics 2)  
PREREQUISITE: Mathematics 201 or equivalent. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.  
Angles; parallel lines; congruent and similar triangles; geometric constructions; right triangle trigonometry; application of formulas for perimeter, area, and volume of geometric figures; and inductive and deductive reasoning. (A)

103  **FOUNDATIONS OF ALGEBRA**  
5 units, 5 lecture hours, (Formerly Mathematics 3)  
PREREQUISITE: Placement by multiple measures. ADVISORY: Eligibility for English 125 and 126 recommended.  
Simplify and solve polynomial, rational, and algebraic expressions and equations; linear, quadratic, exponential, and logarithmic functions; systems of equations and inequalities; radicals; graph functions and relations. (A)

201  **ELEMENTARY ALGEBRA**  
5 units, 5 lecture hours, (Formerly Mathematics 1 and 101)  
PREREQUISITE: Mathematics 255 or designated math placement. ADVISORY: Eligibility for English 125 and 126 recommended.  
Signed numbers, algebraic expressions, linear equations, exponents, polynomials, factoring, rational expressions and equations, graphing, inequalities, systems of equations, radicals, quadratic equations, and applications. Students not eligible for Mathematics 250 if Mathematics has been successfully completed.

203  **SUPPORT FOR COLLEGE ALGEBRA**  
2 units, 2 lecture hours, (Pass/No Pass)  
PREREQUISITE: Placement by multiple measures. COREQUISITE: Mathematics 3A.  
A review of the core prerequisite skills, competencies, and concepts needed in college algebra. Intended for majors in business, science, technology, engineering, and mathematics who are concurrently enrolled in MATH 3A, College Algebra. Review topics include: operations with integers, linear equations and inequalities, properties of exponents and radicals, factoring polynomials, and identifying efficient strategies for solving and graphing equations.

211  **PRE-STATISTICS**  
5 units, 5 lecture hours  
PREREQUISITE: Mathematics 255 or equivalent. ADVISORY: Eligibility for English 125 and 126 recommended.  
Pre-statistics, a non-STEM course, covers core algebra skills needed to understand the concepts, formulas, and graphs used in transfer-level statistics. Pre-statistics integrates numeracy, proportional reasoning, algebraic reasoning, and functions. This course develops conceptual and procedural tools that support the use of key mathematical concepts in statistics in a variety of contexts. This course DOES NOT MEET THE REQUIREMENTS for math, science, computer science, business, engineering, or education majors.
211S SUPPORT FOR STATISTICS
2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: Placement by multiple measures. COREQUISITE: Mathematics 11 or 42.
A review of the core prerequisite skills, competencies, and concepts needed in statistics. Intended for students who are concurrently enrolled in MATH 11, Elementary Statistics. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of descriptive data analysis.

250 COLLEGE ARITHMETIC
3 units, 3 lecture hours, (Formerly Mathematics 50)
PREREQUISITE: Mathematics 260B or placement score required for placement into Mathematics 260C. ADVISORY: Eligibility for English 125 and 126 recommended.
Arithmetic operations of common fractions and decimal fractions; ratio and proportions; percents; order of operations; the metric system; word problems and applications of arithmetic. Designed as a quick refresher of college arithmetic. Students not eligible for Mathematics 250 if Mathematics 260D has been successfully completed.

255 PRE-ALGEBRA
5 units, 5 lecture hours, (Formerly Mathematics 55)
PREREQUISITE: Mathematics 250 or Mathematics 260D or a test score to place out of or above Mathematics 260D. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Designed to increase the student success in Elementary Algebra; ideal for students who have math anxiety or who do not feel ready for the fast pace of Mathematics 201. And introduction to selected topics that are often difficult for Mathematics 201 students (e.g., signed numbers, simplification, equations and inequalities, word problems, factoring, and graphing).

260A ARITHMETIC REVIEW: WHOLE NUMBERS
1.5 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60A)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Review of arithmetic involving computing with whole numbers. Emphasis on word problems and applications of whole numbers.

260B ARITHMETIC REVIEW: FRACTIONS
1.5 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60B)
PREREQUISITE: Mathematics 260A or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Review of arithmetic involving computing with fractions. Emphasis on word problems and applications of fractions.

260C ARITHMETIC REVIEW: DECIMALS
1.5 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60C)
PREREQUISITE: Mathematics 260B or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Review of arithmetic involving computing with decimals. Emphasis on word problems and applications of decimals.

260D ARITHMETIC REVIEW: RATIOS, PROPORTIONS, PERCENTS, AND GEOMETRY
1.5 units, 5 lecture hours, (6 weeks), (Pass/No Pass), (Formerly Mathematics 60D)
PREREQUISITE: Mathematics 260C or appropriate placement score. ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Review of arithmetic involving ratio, proportion, and percents. Introduction to basic geometry topics. Emphasis on word problems.

277 ARITHMETIC FOR THE LEARNING DISABLED
2 units, 6 lab hours, (Pass/No Pass), (Formerly Mathematics 77)
PREREQUISITE: Students must have a diagnosed verifiable disability.
Review of the mechanics of arithmetic involving computing with whole numbers, fractions, decimals, and percents. Includes word problems and applications of arithmetic. Designed for students with severe disabilities and/or learning disabilities.

312 ADVANCED ARITHMETIC FOR PRE STEM STUDENTS
3 lecture hours
PREREQUISITE: None.
Designed as an alternative preparatory path for students who want to pursue careers in STEM related areas. Will focus on the four advanced arithmetic topics that are extensively used in allied health, science, technology, and other STEM related programs. Introductory level, contextualized applications will be emphasized.
MEDICAL ASSISTING (MA)

1 LEGAL AND ETHICAL CONCEPTS
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Medical ethics, jurisprudence, and professional relations in the medical office setting as applied to the medical assistant profession and specialty fields. Assists the students in understanding the medical assistant role as an integral part of the medical profession. (A, CSU)

2 PHARMACOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Mathematics 250 or 260B, 260C, and 260D. Biology 5 recommended. Mathematical concepts needed to calculate a patient's medication dosage correctly combined with a detailed explanation of topics essential to understanding drug sources, legislation relating to drugs, drug reference and classification, actions and administration. (A, CSU)

4 OFFICE LABORATORY PROCEDURES
3 units, 2.5 lecture hours, 2 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 250. Biology 5 or equivalent recommended. Preparation of patient specimens for laboratory study and/or transportation. Specimen screening analysis techniques, recording of findings, regulations, and safety hazards. Precautionary measures relevant to specimen handling, personal and patient safety. (A, CSU)

5 DIAGNOSTIC AND THERAPEUTIC PROCEDURES
3 units, 2.5 lecture hours, 2 lab hours

6A CLINICAL TRAINING
3 units, 3 lecture hours, 1 lab hour,
(Formerly Medical Assisting 60A)
ADVISORY: Eligibility for English 1A recommended. Biology 5 or equivalent recommended. Topics pertinent to medical assisting: infection control, medical asepsis, interview and communication techniques, vital signs, patient education, and assisting in physical exams. (A, CSU)

6B ADVANCED TRAINING
3 units, 3 lecture hours, 1 lab hour,
(Formerly Medical Assisting 60B)
PREREQUISITE: Medical Assisting 60A. ADVISORY: Eligibility for English 1A recommended. Biology 5 or equivalent recommended. Medical assisting procedures in the specialty office and handling of medical emergencies within the scope of practice of a Medical Assistant. (A, CSU)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Supervised employment directly related to the student's major. Offered under specific majors.

Supervised employment extending the classroom based on occupational learning related to medical assisting. Collaborative learning objectives established specific to medical assisting. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

MEDICAL RECORD TECHNOLOGY
SEE HEALTH INFORMATION TECHNOLOGY

MILITARY SCIENCE (MILSC)

1 LEADERSHIP AND PERSONAL DEVELOPMENT
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended. Effective leadership and communication; personal development; life skills; cultural understanding; goal setting; time management; stress management; and comprehensive fitness. Basic knowledge and comprehension of Army leadership dimensions; attributes and core leader competencies. (A, CSU, UC)

2 INTRODUCTION TO TACTICAL LEADERSHIP
1 unit, 1 lecture hour
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended. Leadership fundamentals; focus on problem solving, planning, small unit tactics, and the major components of the Army's leadership philosophy. (A, CSU, UC)
11 FOUNDATIONS OF LEADERSHIP
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.
Creative and innovative tactical leadership strategies; and two historical leadership theories of the Army leadership framework. Personal motivation; team building; assessing team exercises. Developing knowledge of leadership attributes; core leader competencies through the understanding of Army rank, structure, and duties. Broadening knowledge of land navigation and squad tactics. (A, CSU, UC)

12 FOUNDATIONS OF TACTICAL LEADERSHIP
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.
Leading teams in the complex operational environment. Terrain analysis; patrolling; and operation orders. Dynamics of adaptive leadership in the context of military operations. (A, CSU, UC)

50 FRESHMAN LEADERSHIP LABORATORY I
1 unit, 3 lab hours, (Formerly Military Science 50A)
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.
Basic fundamentals of becoming an army officer and adapting to military life. Students will learn and embrace the Army values and warrior ethos while being introduced to the concept of professionalism within the U.S. Army. (A, CSU, UC)

55 FRESHMAN LEADERSHIP LAB II
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.
Hands-on leadership experience via application of field skills and tactical maneuvers in small units of up to platoon size (approximately thirty personnel). Focus is on development of creative problem-solving and resilience while learning individual and small-unit tactical drills. (A, CSU, UC)

60 SOPHOMORE LEADERSHIP LABORATORY I
1 unit, 3 lab hours, (Formerly Military Science 50B)
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.
Advanced knowledge and application of field skills and tactical maneuvers of squad sized elements. Focus is on team building, military communication, and virtual battle system. (A, CSU, UC)

65 SOPHOMORE LEADERSHIP LAB II
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended. Completion of Mathematics 201 recommended.
Advanced knowledge and application of field skills and tactical maneuvers of platoon sized elements. Upon implementation, students will be equipped with the knowledge and foresight to successfully complete the cadet summer training. (A, CSU, UC)

MUSIC (MUS)
For information concerning course requirements for the major, see page 168.

THEORY

1A MUSIC THEORY I
3 units, 3 lecture hours, (Fall only)
COREQUISITE: Music 7A. ADVISORY: Music 3 or the ability to read music as determined by testing. Eligibility for English 1A recommended.
Writing and analysis; fundamentals of music. Designed for the music major. Introduction to the notation and primary elements of tonal music with regard to music from Western history and non-Western cultures. Examples from music literature will demonstrate staff notation in treble and bass clefs, rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; and diatonic chords. History and social context of the above concepts will be discussed. (C-ID MUS 120) (A, CSU, UC)

1AP MUSIC THEORY I-PLUS
3 units, 3 lecture hours, 1 lab hour
COREQUISITE: Music 7A. ADVISORY: Music 3. Eligibility for English 1A recommended.
Course covers content of MUS 1A with extra lab time and guided practice. Appropriate for students desiring extra support due to no prior music experience. Writing and analysis; fundamentals of music. Designed for the music major. Introduction to the notation and primary elements of tonal music with regard to music from Western history and non-Western cultures. Examples from music literature will demonstrate staff notation in treble and bass clefs, rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; and diatonic chords. History and social context of the above concepts will be discussed. (A, CSU)
Music 409

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Music 409
1B MUSIC THEOR Y II
3 units, 3 lecture hours, (Spring only)
PREREQUISITE: Music 1A. COREQUISITE: Music 7A. ADVISORY:
Eligibility for English 1A recommended.
Writing and analysis; functional tonality, harmonization, diatonic
and dominant seventh chords, and secondary function. Designed for the
music major. (C-ID MUS 130) (A, CSU, UC)

2A MUSIC THEORY III
3 units, 3 lecture hours, (Fall only)
PREREQUISITE: Music 1B. COREQUISITE: Music 7C. ADVISORY:
Eligibility for 1A recommended.
Writing and analysis; 2 voice counterpoint and fugue; chromatic
harmony and forms of the 18th century; and reductive analysis. Emphasis
on classical and early romantic periods. Designed for the music major.
(C-ID MUS 140) (A, CSU, UC)

2B MUSIC THEORY IV
3 units, 3 lecture hours, (Spring only)
PREREQUISITE: Music 2A. COREQUISITE: Music 7D. ADVISORY:
Eligibility for English 1A recommended.
Writing and analysis; late 19th and 20th century compositional
practices including serial procedures and indeterminacy. Designed for
the music major. (C-ID MUS 150) (A, CSU, UC)

3 MUSIC FUNDAMENTALS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Eligibility for English 1A recommended.
Fundamental theory of music: pitch, rhythm, meters, scales, keys,
key signatures, intervals, rhythm, and scale dictation. Designed for the
general student, the music major with limited music theory experience,
the commercial music student, and the classroom teacher. (C-ID MUS
110) (A, CSU-GE, UC, I)

4 JAZZ THEORY
3 units, 3 lecture hours, (Fall only)
ADVISORY: Ability to read and notate music. Familiarity with basic
scale and chord construction. Eligibility for English 1A recommended.
Chord, scale, and structural theory relating to the study, performance,
and composition of jazz and contemporary music. (A, CSU, UC)

5 COMPUTER MUSIC PRODUCTION
3 units, 2 lecture hours, 2 lab hours
ADVISORY: Ability to read and play simple melodies on a keyboard. Basic computer skills. Eligibility for English 1A recommended.
Use of synthesizers, computers, sequencing and sound design
software to compose, edit, and record music. Students will create and
compose original music and personal arrangements in styles reflecting
historical periods of popular music. (A, CSU, UC)

6 JAZZ ARRANGING AND COMPOSITION
3 units, 3 lecture hours, (Spring only)
ADVISORY: Ability to read and notate music in treble and bass
clefs strongly recommended. Music 1A or 3 or 4 recommended. Eligibility
for English 1A recommended.
Scoring and composing for jazz and popular vocal/instrumental
combinations; emphasis on contemporary sound; projects will be per­
formed. (A, CSU, UC)

7A EAR TRAINING I
1 unit, 1 lecture hour, 1 lab hour
COREQUISITE: Music 1A. ADVISORY: Eligibility for English 1A
recommended.
Develops materials of Music Theory I through ear training, sight
singing, analysis, and dictation. (C-ID MUS 125) (A, CSU, UC)

7B EAR TRAINING: LEVEL II
1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: Music 7A. COREQUISITE: Music 1B. ADVISORY:
Eligibility for English 1A recommended.
Develops the materials of Music Theory II through ear training,
sight singing, analysis, and dictation. (C-ID MUS 135) (A, CSU, UC)

7C EAR TRAINING: LEVEL III
1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: Music 7B. COREQUISITE: Music 2A. ADVISORY:
Eligibility for English 1A recommended.
Develops the materials of Music Theory III through ear training,
sight singing, analysis, and dictation. (C-ID MUS 145) (A, CSU, UC)

7D EAR TRAINING: LEVEL IV
1 unit, 1 lecture hour, 1 lab hour
PREREQUISITE: Music 7C. COREQUISITE: Music 2B. ADVISORY:
Eligibility for English 1A recommended.
Develops materials of Music Theory IV through ear training, sight
singing, analysis, and dictation. (C-ID MUS 155) (A, CSU, UC)

8 AUDIO ENGINEERING
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
A basic view of the digital recording studio as a sound storage,
manipulation, and reproduction facility. Designed for the music major
and the commercial music student. (A, CSU, UC)
8B  AUDIO ENGINEERING II
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
An intermediate course in audio recording. It focuses on audio engineering skills including preproduction, multi-track digital recording, large format mixing consoles, microphone placement, session procedures, outboard and digital effects, mixdown strategies, and basic mastering skills. (A, CSU)

8C  AUDIO ENGINEERING III
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
An advanced course in audio recording. It focuses on audio engineering skills including post production, mixing, effects, mastering, content creation for broadcast, product manufacture, studio design, business basics, and conducting sessions in a 24 track recording environment (A, CSU)

9   COMPOSITION
2 units, 2 lecture hours, (Spring only)
ADVISORY: Music 2A or the equivalent as determined by testing and examination of student's music theory and composition work. Eligibility for English 1A recommended.
Writing short musical compositions; emphasis on 20th century practices; compositions performed in recital. (A, CSU, UC)

93  COMMERCIAL SONGWRITING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The study of songwriting and concept development from initial idea to its realization in a musical style. Topics include: developing marketable ideas, analysis of target markets, characteristics of diverse musical styles, steps in adapting ideas to styles, song writing and arranging. (A, CSU)

111 THE MUSIC BUSINESS
3 units, 3 lecture hours, (Formerly Music 11)
ADVISORY: Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.
Survey of topics of importance to the music industry professional: Management, copyright, publishing, contracts, promotion, and career development. (A)

112 INTRODUCTION TO FINALE
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to read music and basic computer skills recommended.
Use of Finale music notation software program for the creation of musical scores and parts. (A)

150 PIANO TEACHING I
2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Music 20.
Methods for teaching beginning and elementary piano students including a survey and comparison of piano books available for studio teaching. Practical suggestions for maintaining a private piano studio. (A)

151 PIANO TEACHING II
2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Music 150.
Pedagogical techniques for teaching intermediate level piano students. Performance of solo and ensemble piano literature. (A)

HISTORY & APPRECIATION

12 MUSIC APPRECIATION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Middle Ages through the 21st century. Concert attendance required. Designed for the general student. (C-ID MUS 100) (A, CSU-GE, UC, I)

13 HISTORY OF MUSIC
3 units, 3 lecture hours, (Formerly Music 11)
PREREQUISITE: Ability to read music and understand basic musical terminology. ADVISORY: Eligibility for English 1A recommended.
Music of western civilization from ancient to the present; emphasis on listening. Designed for the music major and the general student with a music background. Outside listening and concert attendance required. (A, CSU-GE, UC, I)

15 WORLD MUSIC SURVEY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
An exploration of global cultures through music. Students discover the characteristics and social contexts of indigenous, historical, and popular music from cultures including African, American Indian, Central Asian, Latin American, Pacific Island, and South Asian/Indian. (A, CSU-GE, UC)

16 JAZZ HISTORY AND APPRECIATION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Vocal and instrumental jazz music from the 1890s through the present. Concert attendance required. Designed for the general student and commercial music student. (A, CSU-GE, UC, I)
17  HISTORY OF ROCK
   3 units, 3 lecture hours
   ADVISORY: Eligibility for English 1A recommended.
   This course examines the music of the most important rock artists and groups from the 1950s through the present. The sociological, economic, and cultural factors that shaped rock music, as well as the music's influence on popular culture, will also be covered. (A, CSU-GE, UC, I)

APPLIED MUSIC

10A  BEGINNING JAZZ IMPROVISATION
   2 units, 1 lecture hour, 3 lab hours,
   (Formerly Music 10)
   ADVISORY: Ability to play an instrument at the intermediate/advanced level is recommended. Ability to read music recommended. Eligibility for English 1A recommended.
   Study of the fundamentals of jazz improvisation: scales, modes, the blues, simple chord progressions, ear training, development of melodic ideas. (A, CSU, UC)

10B  INTERMEDIATE/ADVANCED JAZZ IMPROVISATION
   2 units, 1 lecture hour, 3 lab hours
   PREREQUISITE: Music 10A or equivalent as determined by audition. ADVISORY: Ability to read music, and to play an instrument at the intermediate/advanced level is recommended. Prior jazz improvisation experience recommended.
   Study of intermediate and advanced concepts of jazz improvisation: altered scales, chordal extensions, alterations, and substitutions, and more complex jazz compositions. (A, CSU, UC)

18  BASIC CONDUCTING AND SCORE READING
   2 units, 2 lecture hours, (Spring only)
   PREREQUISITE: Music 1A or 3 or the equivalent as determined by testing.
   Fundamentals of conducting and score reading; standard patterns and baton technique; practice with recordings and large and small college ensembles. Designed for the music major and the commercial music student. (A, CSU, UC)

20  BEGINNING PIANO: LEVEL I
   2 units, 1 lecture hour, 3 lab hours,
   (Formerly Music 20A)
   ADVISORY: Eligibility for English 1A recommended.
   Fundamentals, theory, and terminology; elementary piano techniques, scales, and keyboard harmony; easy compositions drawn from the repertoire of varying historical periods of classical music and different world cultures. Designed for the general student and the classroom teacher. Not intended for students who have had previous piano instructions. (A, CSU, UC)

21  BEGINNING PIANO: LEVEL II
   2 units, 1 lecture hour, 3 lab hours,
   (Formerly Music 20B)
   PREREQUISITE: Music 20 or the equivalent as determined by testing.
   Progressively advancing solo and ensemble work. Baroque, classic, romantic, 20th century literature and world music literature as appropriate to the students development level. Artistic self-expression will be developed through fingering, harmonizing melodies, sight-reading, and duets. Designed for the general student and the classroom teacher. (A, CSU, UC)

24  BEGINNING VOICE: LEVEL I
   2 units, 1.5 lecture hours, 2 lab hours,
   (Formerly Music 25A)
   ADVISORY: Eligibility for English 1A recommended.
   Beginning concepts of tone production and vocal technique using folk, musical theatre and entry level art songs drawn from a variety of historical periods and cultures. Designed for the student with little or no formal voice training. (A, CSU, UC)

25  BEGINNING VOICE: LEVEL II
   2 units, 1.5 lecture hours, 2 lab hours,
   (Formerly Music 25B)
   ADVISORY: Music 24 or the equivalent as determined by testing.
   Eligibility for English 1A recommended.
   Progressively advancing solo and small ensemble work; Baroque, classic, romantic, 20th century literature and world music literature as appropriate to the students development level. Artistic self-expression will be developed through tone production and interpretation. Designed for both music majors and non music majors. (A, CSU, UC)
27 BEGINNING GUITAR: LEVEL I
2 units, 1.5 lecture hours, 2 lab hours, (Formerly Music 28A)
PREREQUISITE: Own instrument required. ADVISORY: Eligibility for English 1A recommended.
Classical and popular guitar playing styles, techniques, rhythms, theory, and note reading. Music from a variety of historical periods and cultures. Designed for the general student and classroom teacher. Not intended for guitarists who read music. (A, CSU, UC)

28 BEGINNING GUITAR: LEVEL II
2 units, 1.5 lecture hours, 2 lab hours, (Formerly Music 28B)
PREREQUISITE: Music 27 or ability to read music. Must have basic understanding of and playing skill in the classical guitar as determined by testing. Own instrument required.
Continuation and expansion of knowledge and techniques learned in Music 27. Classical, popular, and world music studied and performed. Artistic self-expression developed through scales, exercises, and repertoire with extended range, varied rhythms, and with multiple lines. Designed for the serious student of guitar. (A, CSU, UC)

322 SENIOR PIANO SKILLS
1 lecture hour, 3 lab hours
PREREQUISITE: Students must meet the minimum age requirement.
Builds skills in piano performance. Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of piano solo and ensemble music. Weekly individual instruction: ensemble and solo performance required. Students are required to perform solo juries in front of faculty each semester.

326 SENIOR VOCAL SKILLS
1 lecture hour, 1-3 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet the minimum age requirement.
Studies in technical, stylistic, and aesthetic elements of performing repertory from the standard vocal solo literature. Solo performance required. Artistic self-expression will be developed through performance of the standard literature for solo voice. Baroque, classic, romantic, 20th century and world music literature assigned as appropriate to the students development level. Weekly individual instruction and solo performance in recitals required. Semester final solo performance jury proficiency required. Audition Required.

327 SENIOR GUITAR SKILLS
1.5 lecture hour, 2 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet the minimum age requirement.
 Builds skills in guitar performance. Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of guitar solo and ensemble music. Ensemble and solo performance required.

342A SENIOR BRASS SKILLS
1 lecture hour, 1-3 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.
Provides a performance venue for students taking weekly individual private lessons in brass which will include historical and cultural investigation of brass solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.

342B SENIOR WOODWIND SKILLS
1 lecture hour, 1-3 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.
Provides a performance venue for students taking weekly individual private lessons in woodwinds which will include historical and cultural investigation of woodwind solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.

342C SENIOR STRING SKILLS
1 lecture hour, 1-3 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.
Provides a performance venue for students taking weekly individual private lessons in strings which will include historical and cultural investigation of string solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.

342D SENIOR PERCUSSION SKILLS
1 lecture hour, 1-3 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet the minimum age requirement. ADVISORY: Ability to perform on an instrument or voice at intermediate/advanced level.
Provides a performance venue for students taking weekly individual private lessons in percussion which will include historical and cultural investigation of percussion solo and ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required.
348 SENIOR LATIN JAZZ SKILLS
1 lecture hour, 3 lab hours, (Repeats = 99)
ADVISORY: Eligibility for English 1A recommended.
Study and performance of Latin jazz and Afro-Cuban music.
Students will develop an awareness and appreciation of the music of Latin
America and Cuba through artistic and cultural creation. Participation in
concerts and jazz festivals required.

INTERMEDIATE/ADVANCED ENSEMBLES AND
INDIVIDUAL LESSONS

22 INTERMEDIATE/ADVANCED PIANO
1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3), (Formerly Music 21)
PREREQUISITE: Music 21 or the equivalent as determined by
testing.
Technical, stylistic and aesthetic elements of the performing
repertory from the standard literature of piano solo and ensemble
music. Weekly individual instruction: ensemble and solo performance
required. Students are required to perform solo juries in front of faculty
each semester. Please consult instructor regarding variable units. (C-ID
MUS 160) (A, CSU, UC)

26 INTERMEDIATE/ADVANCED VOICE
1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3)
PREREQUISITE: Music 25 or intermediate or advanced level
ability as determined by testing. ADVISORY: Eligibility for English 1A
recommended.
Studies in technical, stylistic, and aesthetic elements of perform­
ing repertory from the standard vocal solo literature. Solo performance
required. Artistic self-expression will be developed through performance
of the standard literature for solo voice. Baroque, classic, romantic,
20th century and world music literature assigned as appropriate to the
students development level. Weekly individual instruction; designed
to help transferring music majors pass vocal jury exams at four-year
colleges and universities. Students working toward the Associate in Arts
in Music for Transfer (AA-T) are advised to enroll in 1 unit only. Please
consult instructor regarding variable units. Audition Required. (A, CSU,
UC)

29 INTERMEDIATE/ADVANCED GUITAR
1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3)
PREREQUISITE: Music 28 or the equivalent performance skills
as determined by testing.
Studies in technical, stylistic and aesthetic elements of the
performing repertory from the standard literature of solo and ensemble
guitar music. Repertoire from varying historical periods of classical music
and different world cultures. Weekly individual instruction. Designed to
help transferring music majors pass jury exams on their instruments at
four-year colleges and universities. Students are required to perform
solo juries in front of faculty each semester. Please consult instructor
regarding variable units. Audition required. (C-ID MUS 160) (A, CSU,
UC)

42A INTERMEDIATE/ADVANCED BRASS
(BRASS CHOIR)
1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3), (Formerly Music 42)
ADVISORY: Eligibility for English 1A recommended. Ability to
perform on an instrument or voice at intermediate/advanced level as
determined by audition.
Provides a performance venue for music majors taking weekly
individual private lessons in brass which will include historical and
cultural investigation of 20th and 21st century brass ensemble literature.
Students are required to perform solo juries in front of faculty each
semester. Audition required. Students wishing to earn the Associate in
Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit.
All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

42B INTERMEDIATE/ADVANCED WOODWINDS
(WOODWIND CHOIR)
1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3), (Formerly Music 43)
ADVISORY: Eligibility for English 1A recommended. Ability to
perform on a woodwind instrument at a college level as determined by
audition.
Provides a performance venue for music majors taking weekly
required individual private lessons in woodwinds which will include
historical and cultural investigation of 20th and 21st century woodwind
ensemble literature. Students are required to perform solo juries in front
of faculty each semester. Audition required. Students wishing to earn
the Associate in Arts in Music for Transfer (AA-T) degree are advised to
enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)
42C INTERMEDIATE/ADVANCED STRINGS
(STRING ORCHESTRA)
1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3), (Formerly Music 44)
ADVISORY: Eligibility for English 1A recommended. Ability to perform on an instrument or voice at intermediate/advanced level as determined by audition.

Provides a performance venue for music majors taking weekly required individual private lessons in strings which will include historical and cultural investigation of 20th and 21st century string ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

42D INTERMEDIATE/ADVANCED PERCUSSION
(PERCUSION ENSEMBLE)
1-2 units, 1 lecture hour, 1-3 lab hours,
(Repeats = 3), (Formerly Music 46)
ADVISORY: Eligibility for English 1A recommended. Ability to perform on an instrument or voice at intermediate/advanced level as determined by audition.

Provides a performance venue for music majors taking weekly required individual private lessons in percussion which will include historical and cultural investigation of 20th and 21st century percussion ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

49 ADVANCED LARGE ENSEMBLES
1 unit, 3 lab hours
ADVISORY: Ability to perform advanced level large ensemble music (as determined by audition) recommended. Eligibility for English 1A recommended.

Study of large ensemble literature (vocal or instrumental). Designed for music major or transfer students. Audition required. (A, CSU, UC) (C-ID MUS 160)

57 SOLO REPERTOIRE STUDIES I
1 unit, 3 lab hours
PREREQUISITE: Four semesters of Music 22, 26, or 29 or the equivalent as determined by audition. ADVISORY: Advanced vocal or instrumental performance skills recommended. Eligibility for English 1A recommended.

Vocal and instrumental solo music of the Baroque and Classical periods. (A, CSU, UC)

59 ADVANCED CHAMBER ENSEMBLES
1 unit, 3 lab hours
ADVISORY: Ability to perform advanced level chamber music recommended. Audition required. Eligibility for English 1A recommended.

Study of vocal and instrumental chamber music, with emphasis on small ensembles. Designed for music major or transfer students. Audition required. (A, CSU, UC)

74A INTERMEDIATE/ADVANCED BRASS
PERFORMANCE PRACTICES
1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in brass which will include 17th and 18th century brass ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

74B INTERMEDIATE/ADVANCED WOODWIND
PERFORMANCE PRACTICES
1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

18th century woodwind ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

74C INTERMEDIATE/ADVANCED STRING
PERFORMANCE PRACTICES
1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.

Provides a performance venue for music majors taking weekly individual private lessons in strings which will include 17th and 18th century string ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)
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Music 415
74D INTERMEDIATE/ADVANCED PERCUSSION
PERFORMANCE PRACTICES
1-2 units, 1 lecture hour, 1-3 lab hours
COREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.
Provides a performance venue for music majors taking weekly individual private lessons in percussion which will include 17th and 18th century percussion ensemble literature. Students are required to perform solo juries in front of faculty each semester. Audition required. Students wishing to earn the Associate in Arts in Music for Transfer (AA-T) degree are advised to enroll in 1-unit. All others take 2-units. (C-ID MUS 160) (A, CSU, UC)

LARGE PERFORMING ORGANIZATIONS

30 COLLEGE CHOIR
1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Ability to perform advanced high school choral music or the equivalent performance skills as determined through audition. Eligibility for English 1A recommended.
Study and performance of choral music for large ensemble. Repertoire is drawn from a variety of historical periods of classical music and different world cultures. Concert, festival, and tour participation required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

34 FRESNO CHORALE
1-2 units, 4-6 lab hours, (Repeats = 3),
(Formerly Music 31)
PREREQUISITE: Audition required. ADVISORY: Eligibility for English 1A recommended.
Study and performance of small choral ensemble specializing in early music. Repertoire is drawn from the historical periods of the Middle Ages, Renaissance and Baroque will be explored. Opportunities for public performance. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

35 CITY SINGERS
2 units, 6 lab hours, (Repeats = 3),
(Formerly Music 33)
ADVISORY: Audition and approval. Ability to perform advanced high school choral music or the equivalent performance skills. Eligibility for English 1A recommended.
Study and performance of choral music for small ensemble. Repertoire is drawn from a variety of historical periods of classical music and different world cultures. Concert, festival and tour participation required. (A, CSU, UC)

39A OPERA WORKSHOP - BAROQUE/CLASSICAL
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.
The rehearsal, study, and performance of scenes and complete operatic works from the Baroque and Classical periods. (C-ID MUS 180) (A, CSU, UC)

39B OPERA WORKSHOP - ROMANTIC PERIOD
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.
The study, rehearsal, and performance of major Romantic and Modern operatic works. (C-ID MUS 180) (A, CSU, UC)

39C CLASSICAL MUSICAL THEATRE
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.
The study, rehearsal, and performance of classic musical theatre, review, or operetta. (A, CSU, UC)

39D CONTEMPORARY OPERA AND MUSICAL THEATRE
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Music 26 or the equivalent as determined by audition recommended. Eligibility for English 1A recommended.
The study, rehearsal, and performance of contemporary opera and/or musical theatre. Performance of new original works is included. (A, CSU, UC)

40 CONCERT BAND
1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.
Modern literature with an emphasis on compositions of composers from the 20th and 21st century will be performed and studied. Interpretation of a variety of band music drawn from various historical periods of classical music and different world cultures with awareness of self-expression. Performances at selected college events. Participation in all performances required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)
41 JAZZ ENSEMBLE
1-2 units, 4-6 lab hours, (Repeats = 3)
ADVISORY: Advanced high school band or jazz ensemble experience or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.
Study and performances of a broad range of jazz ensemble literature. Repertoire from varying historical periods of jazz music and different world cultures. Participation in concerts and jazz festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

46 SYMPHONY ORCHESTRA
1-2 units, 4-6 lab hours, (Repeats = 3), (Formerly Music 45)
ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.
Study and performance of orchestral literature of all eras. Repertoire from varying historical periods of classical music and different world cultures. Combines college students and community members. Participation in all performances is required (two or three each semester). Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

47A JAZZ COMBO: NEW ORLEANS, SWING AND BOP
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.
Performance and analysis of New Orleans, Swing and Bop jazz literature for the small jazz combo. Designed for the music major and the commercial music student. (C-ID MUS 180) (A, CSU, UC)

47B JAZZ COMBO: COOL AND MAINSTREAM
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.
Study and performance of Cool and Mainstream jazz literature for the small ensemble. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

47C JAZZ COMBO: MODERN AND FUSION
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.
Study and performance of Modern and Fusion jazz literature for the small ensemble, with emphasis on original compositions. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

47D JAZZ COMBO: WORLD MUSIC
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level. Music 10A or 10B recommended. Eligibility for English 1A recommended.
Study and performance of World Music literature for the small ensemble with emphasis on original compositions. (C-ID MUS 180) (A, CSU, UC)

48 LATIN JAZZ ENSEMBLE
2 units, 1 lecture hour, 3 lab hours, (See also Chicano-Latino Studies 18)
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1A recommended.
Study and performance of Latin jazz and Afro-Cuban music. Students will develop an awareness and appreciation of the music of Latin America and Cuba through artistic and cultural creation. Participation in concerts and jazz festivals required. (C-ID MUS 180) (A, CSU, UC)

53 LATIN JAZZ WORKSHOP
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1A recommended.
Study and performance of contemporary jazz-based music based on Caribbean, Brazilian, other South American, and Afro-Cuban styles. Repertoire is drawn from historical multi-cultural perspectives. Participation in concerts and jazz festivals required. (C-ID MUS 180) (A, CSU, UC)

54 AFRO-LATIN ENSEMBLE
2 units, 1 lecture hour, 3 lab hours
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1A.
Study and performance of traditional and contemporary music based on shared African and Caribbean influences and heritage. Participation in concerts is required. (C-ID MUS 180) (A, CSU, UC)
55 **AFRO-CARIBBEAN ENSEMBLE**  
2 units, 1 lecture hour, 3 lab hours  
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition. Eligibility for English 1A.  
Study and performance of traditional and contemporary music based on shared African and Caribbean influences and heritage. Participation in concerts is required. (C-ID MUS 180) (A, CSU, UC)

60 **SYMPHONIC CHOIR**  
1-2 units, 4-6 lab hours, (Repeats = 3)  
ADVISORY: Audition. Ability to perform advanced high school choral music or the equivalent performance skills. Eligibility for English 1A recommended.  
Study and performance of choral music, with emphasis on major choral works of the nineteenth and twentieth centuries and orchestral/choral works. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

63 **CHAMBER SINGERS**  
2 units, 6 lab hours  
ADVISORY: Audition and approval. Ability to perform advanced high school/collegial level choral music or equivalent performance skills. Eligibility for English 1A recommended.  
Study and performance of choral chamber music, with emphasis on Renaissance and Classical works. Participation in concerts, festivals, and tours is required. (A, CSU, UC)

68 **SYMPHONIC BAND**  
1-2 units, 4-6 lab hours, (Repeats = 3)  
PREREQUISITE: Intermediate/advanced level skill on a band instrument recommended. Audition required. ADVISORY: Eligibility for English 1A recommended.  
Concepts of intonation, balance, blend, basic articulation and public performance. Rehearsal and performance of symphonic band literature with an emphasis on 19th and 20th century works. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (A, CSU, UC)

70 **CONTEMPORARY JAZZ ENSEMBLE**  
1-2 units, 4-6 lab hours, (Repeats = 3)  
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended. Eligibility for English 1A recommended.  
Study and performance of contemporary jazz ensemble literature. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

71 **LAB JAZZ ENSEMBLE**  
1-2 units, 4-6 lab hours, (Repeats = 3)  
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended. Eligibility for English 1A recommended.  
Study and performance of jazz ensemble literature, with emphasis on traditional and mainstream composers. Participation in concerts and festivals required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

72 **JAZZ COMPOSER’S ORCHESTRA**  
2 units, 1 lecture hour, 4 lab hours  
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills (as determined by audition) are recommended. Eligibility for English 1A recommended.  
Study and performance of complex, compositionally advanced, and professional level modern jazz ensemble literature. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

76 **COLLEGE PHILHARMONIC ORCHESTRA**  
1-2 units, 4-6 lab hours, (Repeats = 3)  
ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills (as determined by audition during the first two weeks) recommended. Eligibility for English 1A recommended.  
Study and performance of orchestral music, with emphasis on major works of the eighteenth and nineteenth centuries. Participation in all public performances is required. Students working toward the Associate in Arts in Music for Transfer (AA-T) are advised to enroll in 1 unit only. (C-ID MUS 180) (A, CSU, UC)

90 **JAZZ COMPOSERS WORKSHOP**  
2 units, 1 lecture hour, 4 lab hours  
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended. Eligibility for English 1A recommended.  
Performance and analysis of original literature for the jazz ensemble/jazz orchestra, with an emphasis on artistic self-expression through student compositions. Repertoire is drawn from varying historical periods of jazz and world cultural influences. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)
91  **JAZZ COMPOSERS ENSEMBLE**  
2 units, 1 lecture hour, 4 lab hours  
ADVISORY: Advanced high school jazz ensemble or band experience, or equivalent performance skills recommended. Eligibility for English 1A recommended.  
Performance of original literature for contemporary jazz ensemble/jazz orchestra, featuring non-standard ensemble groupings, non-traditional instrumentation, with an emphasis on artistic self-expression. Repertoire is drawn from varying historical periods of jazz and world cultural influences. (C-ID MUS 180) (A, CSU, UC)

92  **VOCAL JAZZ ENSEMBLE**  
2 units, 1 lecture hour, 4 lab hours,  
(Repeats = 3)  
ADVISORY: Advanced high school vocal experience or equivalent performance skills recommended. Eligibility for English 1A recommended.  
Rehearsal and performance of vocal jazz ensemble literature. Repertoire is drawn from varying historical periods of jazz and world cultural influences. Participation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

339  **SENIOR OPERA WORKSHOP**  
1 lecture hour, 3 lab hours, (Repeats = 99)  
PREREQUISITE: Students must meet minimum age requirement.  
ADVISORY: Music 26 or the equivalent.  
Builds skills in opera and music theatre performance. Technical, stylistic and aesthetic elements of the performing repertory from the standard literature of musical drama. Performance required.

340  **SENIOR SKILLS CONCERT BAND**  
4 lab hours, (Repeats = 99)  
PREREQUISITE: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition recommended. Eligibility for English 1A recommended.  
Modern literature with an emphasis on compositions of composers from the 20th and 21st century will be performed and studied. Interpretation of a variety of band music drawn from various historical periods of classical music and different world cultures with awareness of self-expression. Performances at selected college events. Participation in all performances required.

341  **SENIOR JAZZ PERFORMANCE ENSEMBLE**  
4-6 lab hours, (Repeats = 99)  
PREREQUISITE: Students must meet minimum age requirement.  
Builds skills in jazz ensemble performance. Study of technical, stylistic and aesthetic elements of repertoire from all eras and styles of jazz ensemble literature. 3-4 performances per semester required. Auditions advised (for ensemble balance and placement within section.)

344  **SENIOR CHORAL SKILLS**  
3 lab hours, (Pass/No Pass), (Repeats = 99)  
PREREQUISITE: Students must meet minimum age requirement.  
Builds skills in choral singing. Basic singing skills, performance practice and ensemble work from all periods of standard choral literature will be studied. Participation in 1-2 semester performances will be required by students. Weekly sectionals also assigned during the semester.

375  **SENIOR COMMUNITY ORCHESTRA**  
4 lab hours, (Repeats = 99)  
PREREQUISITE: Students must meet minimum age requirement.  
ADVISORY: Ability to perform advanced high school band or orchestra music or the equivalent performance skills (as determined by audition during the first two weeks) recommended.  
Study and performance of orchestral music, with emphasis featuring senior student and community soloists. Community musicians are encouraged to participate. Participation in all public performances is required.

**NATIVE AMERICAN STUDIES**  
SEE AMERICAN INDIAN STUDIES

**NATURAL SCIENCE (NATSCI)**

1A  **INTEGRATED SCIENCE: PHYSICS AND CHEMISTRY**  
4 units, 3 lecture hours, 3 lab hours  
PREREQUISITE: Mathematics 103. ADVISORY: Eligibility for English 1A recommended.  
Basic concepts of chemistry and physics and their relation to the everyday environment. Includes laboratory and demonstrations with special application to K-6 teachers. Specifically designed to satisfy the requirements of students who intend on transferring to the CSU Liberal Studies Major. (C-ID PHYS 140 and CHEM 140) (A, CSU-GE, UC)
19  WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL  
1-8 units  
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student's major. Must be currently enrolled in the Associate Degree Nursing Program. Supervised employment extending the classroom based on occupational learning related to nursing. Collaborative learning objectives established specific to nursing. Seventy-five (75) hours of paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

31  FOUNDATIONS AND INTRODUCTION TO MEDICAL - SURGICAL NURSING  
4 units, 4 lecture hours, (Formerly Registered Nursing 1)  
PREREQUISITE: Acceptance into the Registered Nursing Program. COREQUISITE: Registered Nursing 32 and 32A.  
Introduction to registered nursing, the roles of the registered nurse, the nursing process, critical thinking, theoretical concepts and principles necessary to administer beginning level assessment and interventions (procedures) for adults. (A, CSU)

32  FOUNDATIONS AND INTRODUCTION TO MEDICAL - SURGICAL NURSING CLINICAL  
2 units, 6 lab hours, (Formerly Registered Nursing 2)  
Clinical experiences to provide application of the nursing process, critical thinking, knowledge and basic skills necessary to administer beginning level assessment and interventions (procedures) for adults. (A, CSU)

32A  FOUNDATIONS AND INTRODUCTION TO MEDICAL - SURGICAL NURSING SKILLS  
2 units, 6 lab hours  
PREREQUISITE: Acceptance into the Registered Nursing Program. COREQUISITE: Registered Nursing 31.  
Basic nursing skills performance in a simulated clinical environment for the beginning nursing student. (A, CSU)

33  TRANSCULTURAL HEALTH CARE  
1 unit, 1 lecture hour, (Formerly Registered Nursing 21)  
COREQUISITE: Registered Nursing 31.  
Cultural and spiritual concepts as they relate to the application of nursing care. (A, CSU)

33I  TRANSCULTURAL HEALTHCARE, INTERNATIONAL  
1 unit, 1 lecture hour  
ADVISORY: Eligibility for English 1A recommended. Cultural and spiritual concepts as they relate to the application of nursing care in an international setting. Intended for study abroad. (A, CSU)

35A  PHARMACOLOGY A: INTRODUCTION TO PHARMACOLOGY  
1 unit, 1 lecture hour  
COREQUISITE: Registered Nursing 31, 32, and 32A.  
General principles of pharmacology, legal, ethical and safety aspects of medication administration. Drug information includes pharmacotherapeutics, pharmacodynamics, pharmacokinetics, contraindications and precautions, adverse effects and drug interactions, as well as client variables such as health status, life span and gender, diet, lifestyle and habits, environment, and culture in relationship to drug therapy. (A, CSU)

35B  PHARMACOLOGY B: NURSING PHARMACOLOGICAL APPLICATIONS  
2 units, 2 lecture hours  
PREREQUISITE: Registered Nursing 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 41, 42, and 42A.  
Methodical application of drug information that impacts physiologic body systems including contraindications and precautions, adverse effects and drug interactions. Emphasis is placed on nursing responsibilities such as maximizing therapeutic effects and minimizing adverse effects of drug therapy, appropriate client and family teaching, and ongoing assessment of the client. (A, CSU)

41  NURSING CARE OF THE ADULT WITH COMMON HEALTH PROBLEMS  
2.5 units, 2.5 lecture hours  
PREREQUISITE: Registered Nursing 31 and 35A with a grade of "C" or better. COREQUISITE: Registered Nursing 35B, 41, 42, and 42A.  
Theoretical concepts related to the registered nurse caring for the adult client with common health problems. Through utilization of the nursing process, the student will recognize alterations in functioning or illness and formulate client specific nursing interventions. (A, CSU)
42 NURSING CARE OF THE ADULT WITH COMMON HEALTH PROBLEMS CLINICAL
2 units, 6 lab hours
PREREQUISITE: Registered Nursing 31, 32, 32A, and 35A with a grade of “C” or better. COREQUISITE: Registered Nursing 35B, 41, and 42A.
Nursing care of the adult with common health problems in the acute care setting. Implementation of psychomotor skills associated with implementing client care, medication administration, and intravenous therapy. (A, CSU)

42A NURSING CARE OF THE ADULT WITH COMMON HEALTH PROBLEMS SKILLS
1 unit, 3 lab hours
PREREQUISITE: Registered Nursing 31, 32 and 32A with a grade of “C” or better. COREQUISITE: Registered Nursing 41 and 42.
Basic nursing skills performance in a simulated clinical environment for the registered nursing student caring for adults with common health problems. (A, CSU)

45 NURSING CARE OF THE CHILDBEARING FAMILY THEORY
2.5 units, 2.5 lecture hours, (Formerly Registered Nursing 5)
PREREQUISITE: Registered Nursing 31, 32, 32A, 33, and 35A with a grade of “C” or better. COREQUISITE: Registered Nursing 46.
Family centered nursing approach to the child bearing cycle, birth, the neonate, and family bonding; physiology of pregnancy, labor, and recovery. (A, CSU)

46 NURSING CARE OF THE CHILDBEARING FAMILY CLINICAL
1.5 units, 4.5 lab hours, (Formerly Registered Nursing 6)
PREREQUISITE: Registered Nursing 31, 32, 32A, 33 and 35A with a grade of “C” or better. COREQUISITE: Registered Nursing 45.
Clinical application of the principles and practices of nursing care of the child bearing family surrounding the ante-, intra-, and postpartum physical and psychosocial adaptations. (A, CSU)

51 NURSING CARE OF THE ADULT WITH COMPLEX HEALTH PROBLEMS
3 units, 3 lecture hours
PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of “C” or better. COREQUISITE: Registered Nursing 52, 52A and 53.
Synthesize and correlate nursing knowledge and skills in providing care to adults who have complex, multi-system illnesses. Focus will be for the registered nursing students to predict client needs and priorities, and evaluate outcomes on care. (A, CSU)

52 NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS CLINICAL
2 units, 6 lab hours
PREREQUISITE: Registered Nursing 35B, 41, 42, and 42A with a grade of “C” or better. COREQUISITE: Registered Nursing 51, 52A, and 53.
Nursing care of the adult and older adult client with complex health problems in the acute hospital setting and community based support agencies. (A, CSU)

52A NURSING CARE OF THE ADULT AND OLDER ADULT WITH COMPLEX HEALTH PROBLEMS SKILLS
0.5 unit, 1.5 lab hours
PREREQUISITE: Registered Nursing 41, 42 and 42A with a grade of “C” or better. COREQUISITE: Registered Nursing 51, 52 and 53.
Advanced nursing skills performance in a simulated clinical environment for the advanced nursing student caring for the adult and older adult with complex health problems. (A, CSU)

53 NURSING CARE OF THE OLDER ADULT
1 unit, 1 lecture hour
PREREQUISITE: Registered Nursing 35B, 41, and 42 with a grade of “C” or better. COREQUISITE: Registered Nursing 51, 52, and 52A.
Theoretical concepts of the aging process and the Registered Nurse’s role in meeting the needs of older adult clients in the community and acute care settings. (A, CSU)

55 NURSING CARE OF INFANTS AND CHILDREN
2 units, 2 lecture hours, (Formerly Registered Nursing 13)
PREREQUISITE: Registered Nursing 35B, 41, 42, 42A, 45 and 46 with a grade of “C” or better. COREQUISITE: Registered Nursing 56.
Theoretical concepts and integration of the nursing process as it relates to the nursing care of infants, children, and their families. Emphasis is on the concepts and skills related to age appropriate family centered care. (A, CSU)

56 NURSING CARE OF INFANTS AND CHILDREN CLINICAL
2 units, 6 lab hours, (Formerly Registered Nursing 14)
PREREQUISITE: Registered Nursing 35B, 41, 42, 42A, 45 and 46 with a grade of “C” or better. COREQUISITE: Registered Nursing 55.
Clinical application of the nursing process when caring for infants, children, and their families in a pediatric setting. Clinical experience will take place in the acute care setting on pediatric medical-surgical units and various specialty units. (A, CSU)
61  **NURSING CARE OF THE CRITICALLY ILL ADULT AND COORDINATOR OF CARE**  
2.5 units, 2.5 lecture hours  
PREREQUISITE: Registered Nursing 35B, 51, 52, 52A, and 53 with a grade of “C” or better. COREQUISITE: Registered Nursing 61 and 62A. 
Advanced application of the nursing process in the care of critically ill adult clients and coordination of care to groups of clients. Organizing and discriminating data to establish priorities of care. Concepts of the registered nurse as a manager and a leader. Fulfills the computer familiarity graduation requirement for the Registered Nursing major only. (A, CSU) 

62  **NURSING CARE OF THE CRITICALLY ILL ADULT AND COORDINATOR OF CARE CLINICAL**  
3.5 units, 10.5 lab hours  
PREREQUISITE: Registered Nursing 35B, 51, 52, 52A, and 53 with a grade of “C” or better. COREQUISITE: Registered Nursing 61 and 62A. 
Nursing care of the critically ill adult client and coordination of care in the acute hospital setting. Emphasis is placed on coordinating care for multiple adult clients. (A, CSU) 

62A  **NURSING CARE OF THE CRITICALLY ILL ADULT SKILLS**  
0.5 unit, 1.5 lab hours  
PREREQUISITE: Registered Nursing 51, 52, and 52A with a grade of “C” or better. COREQUISITE: Registered Nursing 61 and 62. 
Advanced nursing skills performance in a simulated clinical environment for the advanced nursing student caring for critically ill clients. (A, CSU) 

65  **NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS**  
2 units, 2 lecture hours, (Formerly Registered Nursing 9)  
PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of “C” or better. COREQUISITE: Registered Nursing 66. 
Theoretical concepts comprising a comprehensive overview of functional and dysfunctional human behavior, therapeutic communication, age related problems, treatment modalities, delivery of mental health care services, mental health legislation, and the role and responsibilities of the psychiatric/mental health nurse. (A, CSU) 

66  **NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS CLINICAL**  
2 units, 6 lab hours, (Formerly Registered Nursing 10)  
PREREQUISITE: Registered Nursing 35B, 51, 52, and 53 with a grade of “C” or better. COREQUISITE: Registered Nursing 65. 
Clinical application of the nursing principles and practices of clients with emotional and behavioral disorders in the acute care and community settings. (A, CSU) 

101  **TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM**  
1.5 units, 1.5 lecture hours  
COREQUISITE: Registered Nursing 102. 
Required for all students entering the Fresno City College Registered Nursing Program as an advanced placement student including LVN to RN and transfer students from other nursing programs. Focus on the theory and application of concepts of physical assessment, the nursing process, critical thinking, and the relationship of homeostatic mechanisms to fluids and electrolytes and nursing competencies in the professional roles of clinician, teacher, leader and advocate. (A) 

102  **TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM SKILLS**  
1-2 units, 3-6 lab hours  
COREQUISITE: Registered Nursing 101. 
Required for all students entering the Fresno City College Registered Nursing Program as an advanced placement student including LVN to RN and transfer students from other nursing programs. Focus on skills acquisition and validation prior to entering the hospital setting. (A) 

105  **MEDICATION MATH**  
0.5 unit, 0.5 lecture hour, (Pass/No Pass), (Formerly Registered Nursing 23)  
COREQUISITE: Acceptance into the Registered Nursing Program. 
Calculation of medication dosages, including review of mathematical concepts. (A) 

107  **INTRODUCTION TO NURSING PROCESS**  
0.5 unit, 0.5 lecture hour, (Pass/No Pass), (Formerly Registered Nursing 25)  
COREQUISITE: Acceptance into the Registered Nursing Program. 
Introduction to the nursing process and development of nursing care plans. (A)
201  NCLEX-RN REVIEW
2 units, 2 lecture hours, (Pass/No Pass)
COREQUISITE: Registered Nursing 61.
Review and preparation for National Council Licensure Exam for
Registered Nursing (NCLEX-RN). Includes test format, content review,
and test-taking strategies.

202  SUCCESS STRATEGIES FOR RN
STUDENTS
1 unit, 1 lecture hour, (Pass/No Pass)
PREREQUISITE: Acceptance into the nursing program.
Study and test-taking skills for the student nurse. Assessment
of learning styles and development of strategies for student success,
including application of critical thinking in Registered Nursing.

203  RN REFRESHER COURSE
3 units, 3.5 lecture hours, 13.5 lab hours, (9
weeks), (Pass/No Pass)
PREREQUISITE: RN License or NCLEX-RN eligible.
Didactic review, hospital-based practice, and application of
professional nursing skills for registered nurses and foreign educated
nurses planning to return to the workforce.

204  INTRODUCTION TO THE NURSING
PROFESSION
1.5 units, 3 lecture hours, (9 weeks), (Pass/No Pass)
PREREQUISITE: Acceptance of application into the Fresno City
College RN program.
Introduction to the Registered Nursing program and the Registered
Nursing profession for the pre-nursing student.

205  CARE OF THE CHILDBEARING AND
PARENTING FAMILY THEORY
1 unit, 1 lecture hour
PREREQUISITE: None.
Theoretical concepts and integration of the nursing process as it relates to
the nursing care of childbearing and parenting families.

206  CARE OF THE CHILDBEARING AND
PARENTING FAMILY SIMULATION
0.5 unit, 1.5 lab hours
PREREQUISITE: None.
Application in a simulated setting of the principles and practices of
nursing care for childbearing and parenting families.

207  PERIOPERATIVE NURSING
1.5 units, 1 lecture hours, 2 lab hours, (Pass/No Pass)
PREREQUISITE: Registered Nursing 42A.
Introduction to perioperative nursing care for inpatient and/or
outpatient clients with exposure to the roles of the circulating nurse, scrub
nurse, PACU nurse, and ancillary services.

PARALEGAL (PLEGAL)
Courses required for paralegal degree/certificate are offered regularly.
Some elective courses are scheduled less frequently than others.

1  INTRODUCTION TO PARALEGALISM
3 units, 3 lecture hours
COREQUISITE: Business Administration 20. ADVISORY: Eligibility for English 1A recommended.
Overview of paralegal profession, including historical development,
employment, ethics, job responsibilities, litigation process, legal
analysis, and legal research and writing. (A, CSU)

2A  LEGAL RESEARCH AND WRITING I
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1
Development of legal research skills through the use of primary
and secondary sources. Development of legal writing skills through the
preparation of various legal writing assignments. (A, CSU)

2B  LEGAL RESEARCH AND WRITING II
3 units, 3 lecture hours
PREREQUISITE: Paralegal 2A.
Development of advanced legal research skills using more
sophisticated legal research tools. Development of more sophisticated
legal writing skills through preparation of more advanced and specialized
legal writing assignments. (A, CSU)

3  FAMILY LAW
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Marriage, divorce, nonmarital cohabitation, invalid marriages,
separation, annulments, client interviewing, commencing the proceed-
ings, orders pending trial, support, child custody and visitation, marital
property, adoption and parentage. (A, CSU)

4  PROBATE
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Estates, trusts, wills, probate procedures, property (real and
personal), sales, taxes, formal and informal probate administration. (A,
CSU)
5 BUSINESS ORGANIZATIONS
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Corporations, partnerships, joint ventures, and sole proprietorships. Legal problems associated with the various forms of business organizations including formation, management, control, securities, capitalization, taxation, reorganization, and dissolution. (A, CSU)

6A LITIGATION I
3 units, 3 lecture hours
COREQUISITE: Paralegal 2B.
Role of the paralegal in the litigation process. Court system and jurisdiction issues, types and forms of pleadings, calendaring pleadings, and forms of discovery. (A, CSU)

6B LITIGATION II
3 units, 3 lecture hours
PREREQUISITE: Paralegal 6A.
Role of the paralegal in the litigation process. Forms discovery; calendaring discovery; law and motion; trial setting; arbitration; preparation for trial and trial procedures; judgments; post-trial motions and appeals; and provisional remedies. (A, CSU)

7 LAW OFFICE PRACTICES
3 units, 3 lecture hours
COREQUISITE: Paralegal 1.
Principles of law office management and operation to include human relations, general office procedures, and office supervision. Preparation for working in law office environment. (A, CSU)

8 TORTS/CONTRACTS
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Overview of tort law and contract law doctrines. Basic tort/contract concepts and terminology including negligence, strict liability, intentional and constitutional torts, defenses and immunities, offer and acceptance, consideration, performance and discharge, contract drafting, and contract interpretation. (A, CSU)

10 CRIMINAL LAW AND PROCEDURE
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Introduction to substantive/procedural aspects of criminal law including crimes against persons and property, defenses to crimes, motions to suppress evidence, jury and court trials, sentencing, and appeals. (A, CSU)

11 EVIDENCE
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Legal concepts and terminology associated with the law of evidence, including relevance, hearsay, presumptions, cross-examinations, impeachment, and privileges. (A, CSU)

12 BANKRUPTCY
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Introduction to bankruptcy law including bankruptcy proceedings, evaluating a client’s options in regard to such proceedings, and learning the rights/responsibilities of debtors and creditors. (A, CSU)

13 DISCOVERY AND TRIAL PREPARATION
3 units, 3 lecture hours
PREREQUISITE: Paralegal 6A.
The purposes of discovery, right to discovery, and “hands-on” experience with civil discovery procedures including client interviews, depositions and transcript summarization, interrogatories, requests for inspection, physical and mental examinations, requests for admission, subpoenas, expert witness disclosures, and the organization of discovery for retrieval. Essentials of trial preparation and assisting during the course of trial including courtroom etiquette, selecting and subpoenaing witnesses, preparing exhibits, and jury selection. (A, CSU)

14 LAW OFFICE COMPUTING
3 units, 2 lecture hours, 3 lab hours
COREQUISITE: Paralegal 1 or Paralegal 156 or Business Technology 140.
Introduction to the use of various legal-specific computer software programs (litigation support, forms creation, docketing, document management, etc.) commonly found in law offices. Hands-on training on use of selected programs. (A, CSU)

15 DEBT COLLECTION AND ENFORCEMENT OF JUDGMENTS
3 units, 3 lecture hours
PREREQUISITE: Paralegal 1.
Emphasis on the procedures and forms required for levying on real and personal property pursuant to judgments entered. Specific topics include enforcement strategies, filing judicial liens, issuing writs of execution, levying on personal and real property, preparing wage garnishment, claiming exemptions, and issuing and obtaining orders. (A, CSU)
ADMINISTRATIVE LAW/WORKERS’ COMPENSATION  
3 units, 3 lecture hours  
PREREQUISITE: Paralegal 1.  
Introduction to basic concepts of administrative law and workers’ compensation law. Emphasis placed on agency rulemaking, agency investigations, agency adjudications, judicial review, compensable injuries, temporary disability, permanent disability, and Worker’s Compensation Appeals Board proceedings. (A, CSU)

EMPLOYMENT LAW  
3 units, 3 lecture hours  
PREREQUISITE: Paralegal 1.  
Overview of legal relationship between employer and employee. Emphasis placed on basic understanding of employment-related laws, and federal and state regulatory environment. Subjects covered include pre-employment concerns, legal aspects of the employer/employee relationship, discrimination issues and actions, terminations, and ethical issues in employment law. (A, CSU)

WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL  
1-8 units  
COREQUISITE: Fall and Spring Semesters. Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student’s major. Offered under specific majors.  
Supervised employment extending the classroom based on occupational learning related to paralegalism. Collaborative learning objectives established specific to a paralegal career. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

CIVIL RIGHTS AND LIBERTIES  
3 units, 3 lecture hours  
PREREQUISITE: Paralegal 1.  
An overview of the constitutional interpretation of civil rights and liberties focusing on the Bill of Rights and landmark U.S. Supreme Court decisions in these areas. Emphasis placed on: speech, press, other forms of expressive conduct, obscenity, church/state relations, voting rights, various forms of discrimination, personal privacy, abortion, “right to die,” freedom of association, etc. (A, CSU)

LEGAL DOCUMENT PROCESSING  
3 units, 2 lecture hours, 3 lab hours, (See also Business & Technology 140), (Formerly Paralegal 56)  
ADVISORY: Business & Technology 1 or 28 or basic knowledge of a word processing. Ability to type at least 25 gross words per minute is recommended. Eligibility for English 125 and 126 or English for Multi-Lingual Students 167W and 168R recommended.  
Producing and formatting business and legal correspondence and documents using a current word processing program. (A)

THEORIES OF KNOWLEDGE AND REALITY  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
An introduction to philosophical thinking on the nature of knowledge, truth, and reality. (C-ID PHIL 100) (A, CSU-GE, UC, I)

HONORS THEORIES OF KNOWLEDGE AND REALITY  
3 units, 3 lecture hours, (Formerly Honors 1P)  
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.  
An introduction to philosophical thinking on the nature of knowledge, truth, and reality. Honors sections may also focus on an historical overview or a more in-depth study of a significant branch of philosophy e.g. philosophy of language or philosophy of mind. (C-ID PHIL 100) (A, CSU-GE, UC, I)

SOCIAL AND POLITICAL PHILOSOPHY  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
An introduction to social and political philosophies; inquiry into views of human nature and human happiness, inquiry into the best form of society or government. (A, CSU-GE, UC, I)

ETHICS  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
Reading and critical analysis of primary texts on moral theory. Examinations of ethical concepts such as good, evil, moral obligation. Conditions necessary to ethical decision-making, conscience, moral rules, justice, and free will. (C-ID PHIL 120) (A, CSU-GE, UC, I)
1CH HONORS ETHICS
3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Reading and critical analysis of primary sources on moral theory. Examinations of ethical concepts such as good, evil, and moral obligation. Conditions necessary to ethical decision-making—conscience, moral rules, justice, and free will—may also be discussed. Honors sections may also involve a more in-depth study of a significant area of ethics or moral philosopher, and will require additional writing. (C-ID PHIL 120) (A, CSU-GE, UC, I)

1D WORLD RELIGIONS
3 units, 3 lecture hours, (Formerly Philosophy 10)
PREREQUISITE: English 1A.
Basic beliefs and practices of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. (A, CSU-GE, UC, I)

2 CRITICAL REASONING AND ANALYTIC WRITING
3 units, 3 lecture hours, (Formerly Philosophy 4)
PREREQUISITE: English 1A.
Principles and methods of good reasoning, with an emphasis on deductive logic, including formal techniques of sentential logic. Includes the identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to various areas of study and real world situations. (A, CSU-GE, UC, I)

2H HONORS CRITICAL REASONING AND ANALYTIC WRITING
3 units, 3 lecture hours
PREREQUISITE: English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

Principles and methods of good reasoning, with an emphasis on deductive logic, including formal techniques of sentential logic. Includes the identification of arguments, developing and assessing basic deductive and inductive reasoning, common fallacies, and application of each element to various areas of study and real world situations. Honors sections may also focus on an historical overview, or a more in-depth study of a significant branch of philosophy, e.g., environmental ethics or philosophy of race. (A, CSU-GE, UC, I)

3A ANCIENT PHILOSOPHY
3 units, 3 lecture hours
ADVISORY: English 1A.
An introduction to ancient philosophy with an emphasis on Greek thought from the Pre-Socratic philosophers to Aristotle. (A, CSU-GE)

3B MODERN PHILOSOPHY
3 units, 3 lecture hours
ADVISORY: English 1A.
Addresses 16th through 18th century philosophy with emphasis on broad epistemological and/or metaphysical developments of empiricism and rationalism in philosophical thought from Descartes to Kant and may include approximate precursors and successors. (C-ID PHIL 140) (A, CSU-GE, UC, I)

5 PHILOSOPHY OF RELIGION
3 units, 3 lecture hours
PREREQUISITE: English 1A.
The philosophical, critical, scrutiny of some of the issues arising from the monotheistic classical tradition. For example: the nature of God; the existence of God; experience of God; the relation between faith and reason; the problem of evil; free will; immortality. (A, CSU-GE, UC, I)

6 SYMBOLIC LOGIC
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Deductive systems of logic, including syllogistic logic as well as propositional and predicate symbolic logic. (C-ID PHIL 210) (A, CSU-GE, UC)

PHOTOGRAPHY (PHOTO)

5 INTRODUCTION TO PHOTOGRAPHY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Non-lab beginning photography course introducing the basic principles, practices, and aesthetics of image making using digital or film cameras. Survey of photography's historical and contemporary role in our multicultural society. Emphasis on: using the camera, light, and visual language for expressing ideas photographically. Students must provide their own basic camera. (A, CSU-GE, UC)
6 DIGITAL IMAGING FUNDAMENTALS
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Theories and practices of manually adjustable digital cameras; technical and creative use of manual camera controls and capture. Topics include: automatic vs. manual shooting modes, camera menus, exposure control, depth of field, motion control, basic flash, white balance, file formats, capture workflow, and camera care as well as the legal and ethical issues of photography. Image processing involving tonal range, organization and color adjustment using Adobe Lightroom. (A, CSU, UC)

12 BEGINNING PHOTOSHOP
3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 22)
ADVISORY: Eligibility for English 1A recommended.
Introduction to Photoshop including a variety of problem solving lessons and projects using: digital image capture, organization, basic tone and color adjustments, basic retouching, and printing techniques. (A, CSU, UC)

15 PHOTOGRAPHY AND VISUAL LITERACY
3 units, 3 lecture hours
ADVISORY: Photography 12.
The nature and character of photography; its use for communication and expression. Visual literacy and photography as a universal language. How concept, design, and creation of the photographic image are utilized in our culture. (A, CSU)

17 CLASSIC BLACK AND WHITE PHOTOGRAPHY
3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 10)
ADVISORY: Photography 5. Eligibility for English 1A recommended.
Theories and practices of traditional 35mm and 4x5 Black and White film photography; technical and creative use of manual camera controls and accessories, film development, printing, print presentation techniques and legal and ethical aspects of photography. Projects emphasize aesthetics and photographic problem solving utilizing text and classroom information. (A, CSU, UC)

18 DIGITAL BLACK AND WHITE PHOTOGRAPHY
3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 20)
PREREQUISITE: Photography 12 or equivalent. ADVISORY: Photography 17.
Interpreting reality through the many pathways to digital black and white photography using Adobe Photoshop and other software applications on a variety of projects. Projects emphasize the vision, language, and technique of black and white print. (A, CSU, UC)

23 ADVANCED PHOTOSHOP
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 12 or Graphic Communications 31 or equivalent.
Advanced techniques for computer enhanced still photograph image capture, processing, and output technologies. Use of Adobe Photoshop as primary software to complete real world assignments and produce a portfolio of digital photography. (A, CSU, UC)

26 LIGHTING PRINCIPLES
3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 24 and 35)
PREREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12.
Photographic lighting qualities, characteristics, and styles. Using studio lighting techniques, tabletop still life subjects will be photographed to emphasize problem solving and personal expression. (A, CSU)

30 EDITORIAL PHOTOGRAPHY
3 units, 2 lecture hours, 3 lab hours
Theories and practices of photography in the field of mass communication. Photography as it is applied to: newspapers, magazines, public relations, websites, business and publishing applications. Emphasis on communication of ideas, storytelling, and social reportage using the power of photographs as a force in communication. Close consideration of the legal and ethical aspects of photography. (C-ID JOUR 160) (A, CSU)

32 COMMERCIAL PORTRAITURE
3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 23 and 25)
PREREQUISITE: Photography 6 or equivalent. ADVISORY: Photography 12.
Studio and environmental commercial portraiture. Emphasis on style and the psychology of body language, lighting, composition, and facial expression. Portrait subjects include: individuals, couples, groups, and weddings. (A, CSU)
40 PROFESSIONAL PHOTOGRAPHIC PRACTICES
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 12 or equivalent.
Theories and practices of picture selection for portfolios and other visual environments such as publishing, gallery presentations, annual reports, websites, magazines, commercial clients or visual media of any kind. Topics include advanced theory in communication with emphasis on visual language, legal and ethical considerations, organization and design in developing a professional portfolio strategy to be successful in both traditional and online marketplaces. (A, CSU)

45 ADVANCED PROJECTS
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 18 or 23 or 26 or 30 or 32 or 47.
Limited enrollment course open only to those students who have completed the prerequisite for their proposed project. Projects must emphasize advanced approaches not covered in the prerequisite courses. Students will research their topic and present their work and findings to the class. Independent study contract between instructor and student required. (A, CSU)

49 MULTIMEDIA PHOTOJOURNALISM
3 units, 2 lecture hours, 3 lab hours
This is an advanced visual journalism course that puts an emphasis on multimedia storytelling using different assets such as still, video, and web based media. The course will focus on re-imagining storytelling, teaching the student to use factual information as their inspiration to build stories. (A, CSU)

57 APPLIED COLOR AND ALTERNATIVE PHOTOGRAPHIC MEDIA
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Graphic Communications 31 or Photography 12.
ADVISORY: Photography 23.
Developing a personal vision by seeing and working with digital media using various media and methods for creating photographic images. Contemporary digital processes will be used and combined for representational and non-representational images. Color Theory and Color Management in the photographic medium and its relationship to alternative media. (A, CSU, UC)

267 INTRO TO AERIAL MULTIMEDIA
0.5 unit, 1 lecture hour, 2 lab hours,
(9 weeks)
This course is an introduction to Aerial still and motion image capture. Both Photography and Video elements will be explored. Safety, regulations, industry applications, storytelling, and software output are part of the presented points of the coursework.

277 AERIAL MULTIMEDIA II
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 267. Students must be able use both hands to operate and read data on the controller. Students must be able to visually see in flight drone as needed.
Intermediate uses of unmanned aerial vehicles for digital imaging. This hands-on course covers high resolution video capture, aerial imaging, intelligent mission planning, for image capture, editing, mapping and related uses.

323 ADVANCED PHOTOSHOP
2 lecture hours, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Retakes = 4)
PREREQUISITE: Photography 12 or Graphic Communications 31.
Advanced techniques for computer enhanced still photograph image capture, processing, and output technologies. Use of Adobe Photoshop as primary software to complete real world assignments and produce a portfolio of digital photography.

PHYSICAL EDUCATION (PE)

GENERAL ACTIVITY COURSES

3 ARCHERY
1 unit, 3 lab hours, (Formerly Physical Education ACT 14)
ADVISORY: Eligibility for English 1A recommended.
Techniques of shooting, correct use of equipment, and safety procedures. Events include target archery, tournament rounds, and competitive shooting. (A, CSU, UC)

4 BADMINTON
1 unit, 3 lab hours, (Formerly Physical Education ACT1)
ADVISORY: Eligibility for English 1A recommended.
Strokes, rules, etiquette, and strategy. Singles and doubles game experience. (A, CSU, UC)

4B INTERMEDIATE BADMINTON
1 unit, 3 lab hours
PREREQUISITE: Physical Education 4.
An expanded approach to the fundamental badminton strokes and strategies obtained in beginning badminton. Students will build upon their knowledge of the game of badminton, and be able to successfully compete with peers of their skill level. (A, CSU-GE)
5 BASKETBALL
1 unit, 3 lab hours, (Formerly Physical Education ACT 5A)
ADVISORY: Eligibility for English 1A recommended.
Basic skills, rules, strategy, offense and defense. Tournaments according to skill level of students. (A, CSU, UC)

6 FITNESS AND HEALTH
1 unit, 3 lab hours, (Formerly Physical Education ACT 15A)
ADVISORY: Eligibility for English 1A recommended.
Class explores various activities to develop posture, strength, flexibility, endurance and relaxation. (A, CSU, UC)

7 GOLF
1 unit, 3 lab hours, (Formerly Physical Education ACT 10)
ADVISORY: Eligibility for English 1A recommended.
Grip, stance, and swing fundamentals. Instruction on the short game basics. Swing evaluation for each student. Instruction on golf etiquette, equipment and the rules of golf. (A, CSU, UC)

8 BASIC SELF DEFENSE
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Theory and techniques of self defense and personal safety. Mental and physical aspects of basic self defense. Content includes recognizing and avoiding dangers, and skills and strategies for employing physical defense when necessary. (A, CSU, UC)

9 CIRCUIT TRAINING
1 unit, 3 lab hours, (Formerly Physical Education ACT 17A)
ADVISORY: Eligibility for English 1A recommended.
Designed to test individuals, assign an exercise program and re-test to note progress. Emphasis on individual training. Use of weightlifting machines. (A, CSU, UC)

12 VOLLEYBALL
1 unit, 3 lab hours, (Formerly Physical Education ACT 5G)
ADVISORY: Eligibility for English 1A recommended.
Basic skills, rules, strategy, offense and defense. Tournaments according to skill level of students. (A, CSU, UC)

12B INTERMEDIATE VOLLEYBALL
1 unit, 3 lab hours
PREREQUISITE: Physical Education 12.
Intermediate drills and conditioning workouts for experienced players. (A, CSU-GE)

13 TENNIS
1 unit, 3 lab hours, (Formerly Physical Education ACT 7)
ADVISORY: Eligibility for English 1A recommended.
Strokes, rules, etiquette and game strategy for singles and doubles. (A, CSU, UC)

13B INTERMEDIATE TENNIS
1 unit, 3 lab hours
PREREQUISITE: Physical Education 13. Experience playing competitively at the high school junior varsity or varsity level may satisfy prerequisite. ADVISORY: Eligibility for English 1A recommended.
An expanded approach to the fundamental tennis strokes and strategies obtained in beginning tennis. Students will build upon their knowledge of the game of tennis, and be able to successfully compete with peers of their skill level. (A, CSU, UC)

15A WEIGHT TRAINING (WOMEN)
1 unit, 3 lab hours, (Formerly Physical Education ACT 11B)
ADVISORY: Eligibility for English 1A recommended.
Total body developed by exercising against resistance, utilizing a pre-determined circuit. Proper weight lifting techniques and safety practices are demonstrated and discussed. A special emphasis on the body building needs of women. (A, CSU, UC)

15B WEIGHT TRAINING (MEN)
1 unit, 3 lab hours, (Formerly Physical Education ACT 11A)
ADVISORY: Eligibility for English 1A recommended.
Total body developed by exercising against weighted resistance, and doing isotonic and circuit exercises. Use of weight lifting equipment. Safety methods of lifting and the use of equipment. Special emphasis on body building needs of men. (A, CSU, UC)
15C  WEIGHT TRAINING (COED)
1-2 units: 2 units, 6 lab hours; 1 unit, 3 lab hours, (Formerly Physical Education ACT 11C)
ADVISORY: Eligibility for English 1A recommended.
Total body development by exercising against weighted resistance; isotonic and circuit exercises. Class is structured to satisfy the body building needs of both men and women as they participate in the same environment. Use of weight lifting equipment. Safe methods of lifting and the use of equipment. (A, CSU, UC)

17  HATHA YOGA
1 unit, 3 lab hours, (Formerly Physical Education ACT 28)
ADVISORY: Eligibility for English 1A recommended.
Fundamental exercises for flexibility, strength, relaxation, and improvement of concentration drawn largely from the Hatha Yoga tradition. (A, CSU, UC)

27  HIGH-INTENSITY CARDIO INTERVAL TRAINING
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Designed to improve cardiovascular fitness by running predetermined intervals on a regulation running track. The intervals will vary from 50 - 200 meters. (A, CSU, UC)

70  FITNESS AEROBICS
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Designed to provide a total body workout that develops aerobic endurance, increases range of motion and muscular strength, and improves flexibility. (A, CSU, UC)

71  SOCCER
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Basic skills, rules, strategy, offense and defense. Tournaments according to skill level of students. (A, CSU, UC)

72  SPINNING FOR FITNESS
1 unit, 3 lab hours
ADVISORY: Eligibility for English 1A recommended.
Designed to improve overall physical fitness and health through the use of stationary spin bikes. Proper spin techniques and safety practices are demonstrated. Suitable for all genders and fitness levels. (A, CSU, UC)

PREPROFESSIONAL COURSES

18A  SPORTS MEDICINE LAB A
2 units, 6 lab hours, (Formerly Physical Education 19)
ADVISORY: Eligibility for English 1A recommended.
Supervised employment extending the classroom based on occupational learning related to Physical Education and Sports Medicine. Collaborative learning objectives established specific to the particular occupational field. One hundred (100) hours per semester. Orientation hours may be required. (A, CSU)

18B  SPORTS MEDICINE LAB B
2 units, 6 lab hours
ADVISORY: Eligibility for English 1A recommended.
Supervised employment extending the classroom based on occupational learning related to Physical Education and Sports Medicine. Collaborative learning objectives established specific to the particular occupational field. One hundred (100) hours of lab per semester. Orientation hours may be required. (A, CSU)

20  ATHLETIC TRAINING
4 units, 3 lecture hours, 3 lab hours, (Formerly Physical Education PRE 32)
ADVISORY: Eligibility for English 1A recommended. (A background in science is preferred).
Taping, treating, prevention, and evaluating athletic injuries. Emergency first aid. (A, CSU, UC)

23  LIFEGUARD TRAINING
3 units, 2 lecture hours, 3 lab hours, (Formerly Physical Education PRE 31A)
PREREQUISITE: Intermediate swimming test: freestyle, elementary backstroke, breaststroke, and sidestroke. ADVISORY: Eligibility for English 1A recommended.
Lifeguarding and water safety techniques. Red Cross Certification available. (A, CSU, UC)

24  SPORTS OFFICIATING
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Understanding and interpreting the rules and mechanics of officiating one or more of the following activities: baseball, basketball, football, flag football, soccer, softball, track and volleyball. (A, CSU, UC)
SPORTS PSYCHOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The study and application of psychological principles and foundations to sport and exercise. Promote concepts and applied principles of sport and exercise psychology. (A, CSU, UC)

FOUNDATIONS OF COACHING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Introduction to the profession of athletic coaching. Theories and practices that provide the foundation to coaching. Includes coaching philosophies, communication skills, motivational techniques, principles for training, and program management. (A, CSU, UC)

INTRODUCTION TO KINESIOLOGY
3 units, 3 lecture hours, (Formerly Physical Education 22 and Physical Education PRE 35)
ADVISORY: Eligibility for English 1A recommended.
Nature and scope of physical education and its sub-disciplines. Historical background, philosophy, curriculum, current problems, issues, and career options. (C-ID KIN 100) (A, CSU, UC)

INTERCOLLEGIATE ACTIVITY COURSES
Medical clearance resulting from a physical examination by the college's team physician is required prior to a student's first enrollment in any intercollegiate activity course.

COMPETITIVE BASEBALL
3 units, 9.5 lab hours, (Spring), (Repeats = 2), (Formerly Physical Education INT 41)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

OFF-SEASON CONDITIONING FOR BASEBALL
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for baseball players. (A, CSU, UC)

COMPETITIVE BASKETBALL
3 units, 9.5 lab hours, (Fall and Spring), (Repeats = 2), (Formerly Physical Education INT 40)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

OFF-SEASON CONDITIONING FOR BASKETBALL
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for basketball players. (A, CSU, UC)

COMPETITIVE CROSS COUNTRY
3 units, 9.5 lab hours, (Fall), (Repeats = 2), (Formerly Physical Education INT 48)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)
33B  COMPETITIVE FOOTBALL
    3 units, 9.5 lab hours, (Fall), (Repeats = 2),
    (Formerly Physical Education INT 42)
    ADVISORY: Eligibility for English 1A recommended.
    Designed primarily for students possessing the desire, ability,
    and skills necessary to compete on the intercollegiate level. Prospective
    participants should confer with the head coach of the sport before
    enrollment. A minimum of 9.5 hours participation per week during the
    season of the sport normally is required. (A, CSU, UC)

33C  OFF-SEASON CONDITIONING FOR
    FOOTBALL
    1 unit, 3 lab hours, (Repeats = 2)
    ADVISORY: Eligibility for English 1A recommended.
    Off-season conditioning activities for football players. (A, CSU, UC)

34B  COMPETITIVE GOLF
    3 units, 9.5 lab hours, (Repeats = 2),
    (Formerly Physical Education INT 46)
    ADVISORY: Eligibility for English 1A recommended.
    Designed primarily for students possessing the desire, ability,
    and skills necessary to compete on the intercollegiate level. Prospective
    participants should confer with the head coach of the sport before
    enrollment. A minimum of 9.5 hours participation per week during the
    season of the sport normally is required. (A, CSU, UC)

34C  OFF-SEASON CONDITIONING FOR GOLF
    1 unit, 3 lab hours, (Repeats = 2)
    ADVISORY: Eligibility for English 1A recommended.
    Off-season conditioning activities for golfers. (A, CSU, UC)

35B  CHEER AND STUNT
    2 units, 6 lab hours, (Repeats = 3),
    (Formerly Physical Education PRE 38)
    ADVISORY: Eligibility for English 1A recommended.
    Designed primarily for students possessing the desire, ability,
    and skills necessary to participate in cheer and stunt on the college
    level. Prospective participants should confer with the instructor before
    enrollment. (A, CSU, UC)

36B  COMPETITIVE SOCCER
    3 units, 9.5 lab hours, (Fall), (Repeats = 2),
    (Formerly Physical Education INT 39)
    ADVISORY: Eligibility for English 1A recommended.
    Designed primarily for students possessing the desire, ability,
    and skills necessary to compete on the intercollegiate level. Prospective
    participants should confer with the head coach of the sport before
    enrollment. A minimum of 9.5 hours participation per week during the
    season of the sport normally is required. (A, CSU, UC)

36C  OFF-SEASON CONDITIONING FOR
    SOCCER
    1 unit, 3 lab hours, (Repeats = 2)
    ADVISORY: Eligibility for English 1A recommended.
    Off-season conditioning activities for soccer players. (A, CSU, UC)

37B  COMPETITIVE SOFTBALL
    3 units, 9.5 lab hours, (Spring), (Repeats = 2),
    (Formerly Physical Education INT 36)
    ADVISORY: Eligibility for English 1A recommended.
    Designed primarily for students possessing the desire, ability,
    and skills necessary to compete on the intercollegiate level. Prospective
    participants should confer with the head coach of the sport before
    enrollment. A minimum of 9.5 hours participation per week during the
    season of the sport normally is required. (A, CSU, UC)

37C  OFF-SEASON CONDITIONING FOR
    SOFTBALL
    1 unit, 3 lab hours, (Repeats = 2)
    ADVISORY: Eligibility for English 1A recommended.
    Off-season conditioning activities for softball players. (A, CSU, UC)

38B  COMPETITIVE TENNIS
    3 units, 9.5 lab hours, (Spring), (Repeats = 2),
    (Formerly Physical Education INT 44)
    ADVISORY: Eligibility for English 1A recommended.
    Designed primarily for students possessing the desire, ability,
    and skills necessary to compete on the intercollegiate level. Prospective
    participants should confer with the head coach of the sport before
    enrollment. A minimum of 9.5 hours participation per week during the
    season of the sport normally is required. (A, CSU, UC)

38C  OFF-SEASON CONDITIONING FOR TENNIS
    1 unit, 3 lab hours, (Repeats = 2)
    ADVISORY: Eligibility for English 1A recommended.
    Off-season conditioning activities for tennis players. (A, CSU, UC)

39B  COMPETITIVE TRACK AND FIELD
    3 units, 9.5 lab hours, (Spring), (Repeats = 2),
    (Formerly Physical Education INT 43)
    ADVISORY: Eligibility for English 1A recommended.
    Designed primarily for students possessing the desire, ability,
    and skills necessary to compete on the intercollegiate level. Prospective
    participants should confer with the head coach of the sport before
    enrollment.
39C OFF-SEASON CONDITIONING FOR TRACK AND FIELD
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for track and field team members. (A, CSU, UC)

40B COMPETITIVE VOLLEYBALL
3 units, 9.5 lab hours, (Fall), (Repeats = 2),
(Formerly Physical Education INT 37)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

40C OFF-SEASON CONDITIONING FOR VOLLEYBALL
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for volleyball players. (A, CSU, UC)

41B COMPETITIVE WRESTLING
3 units, 9.5 lab hours, (Fall), (Repeats = 2),
(Formerly Physical Education INT 45)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

41C OFF-SEASON CONDITIONING FOR WRESTLING
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for wrestlers. (A, CSU-GE, UC)

42B COMPETITIVE WATER POLO
3 units, 9.5 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU, UC)

42C OFF-SEASON CONDITIONING FOR WATER POLO
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for water polo players. (A, CSU, UC)

43B COMPETITIVE SWIMMING AND DIVING
3 units, 9.5 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of the sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU)

43C OFF-SEASON CONDITIONING FOR SWIMMING & DIVING
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for swimmers and divers. (A, CSU, UC)

44B COMPETITIVE SAND VOLLEYBALL
3 units, 9.5 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Designed primarily for students possessing the desire, ability, and skills necessary to compete on the intercollegiate level. Prospective participants should confer with the head coach of each sport before enrollment. A minimum of 9.5 hours participation per week during the season of the sport normally is required. (A, CSU-GE)

44C OFF-SEASON CONDITIONING FOR SAND VOLLEYBALL
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for sand volleyball players. (A, CSU-GE, UC)

45 PERFORMANCE TRAINING AND CONDITIONING TECHNIQUES FOR INTERCOLLEGIATE ATHLETICS
0.5-2 units, 2-6 lab hours, (Repeats = 3)
ADVISORY: Eligibility for English 1A recommended.
Resistance training for intercollegiate athletics. (A, CSU, UC)
INTRODUCTORY PHYSICAL SCIENCE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended. Mathematics 201 recommended.
Emphasis on a survey of physics, chemistry, and earth science, including mechanics, thermodynamics, electricity and magnetism, optics, modern physics, nuclear physics, chemical systems, chemical reactions, geologic time, weather phenomena, astronomy, and cosmology. Designed primarily for non-science majors. (A, CSU-GE, UC, I)

APPLICATIONS OF PHYSICAL SCIENCE
1-3 units, 1-3 lecture hours, (Pass/No Pass)
ADVISORY: Eligibility for English 1A recommended. Mathematics 250.
Physical Science field studies of an international location such as Iceland, England, Switzerland, etc. Required field trips. Additional costs for travel abroad. (A, CSU)

GENERAL PHYSICS 1
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Mathematics 4A. ADVISORY: Eligibility for English 1A recommended.
Mechanics, thermal physics, oscillations, and waves. Designed primarily for life science and related majors. (C-ID PHYS 105 and PHYS 100S = PHYS 2A + 2B) (A, CSU-GE, UC, I)

GENERAL PHYSICS 2
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 2A.
Electricity and magnetism, optics, and introduction to modern physics. Designed primarily for life science and related majors. (C-ID PHYS 110 and PHYS 100S = PHYS 2A + 2B) (A, CSU-GE, UC, I)

PHYSICS FOR SCIENTISTS AND ENGINEERS
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4A. ADVISORY: Eligibility for English 1A recommended.
Classical mechanics and mechanical waves. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 205 and PHYS 200S = PHYS 4A + 4B + 4C) (A, CSU-GE, UC, I)
2H HONORS AMERICAN GOVERNMENT
3 units, 3 lecture hours
PREREQUISITE: Eligibility for English 1A. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
Analysis of political and judicial institutions and processes, political ideology, political economy, the role of the media, civil rights, California state and local government. Satisfies the U.S. Constitution requirements and the national, state and local government requirements for transfer students. In addition Honors sections investigate in detail the original design of the American political system, including the values imbued in the Constitution, the construction of the federal system, and the legal responsibilities of the major actors, and contrast those features with the current conditions in American politics. Emphasis is given to explaining the differences between the two situations, and requiring students to suggest how access to the present system can be gained and used. (C-ID POLS 110) (A, CSU-GE, UC, I)

3 INTRODUCTION TO POLITICAL THEORY AND THOUGHT
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
Examination of various theoretical approaches to politics and of basic political problems and proposed solutions. Analysis of selected political theories and of the relevance of theory to contemporary problems. (C-ID POLS 120) (A, CSU-GE, UC, I)

5 COMPARATIVE GOVERNMENT
3 units, 3 lecture hours
ADVISORY: Political Science 2 and eligibility for English 1A, and Mathematics 260D.
Comparative analysis of different kinds of political systems; their history, political institutions, processes and policies; the environments in which they occur and their consequences. (C-ID POLS 130) (A, CSU-GE, UC, I)

13 LEGAL AND JUDICIAL REASONING
units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Statutory, common law and constitutional interpretation; examination of judicial and legal reasoning and the evolution of fundamental constitutional rights and principles. (A, CSU-GE, UC)

24 INTERNATIONAL RELATIONS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
How nations manage their relations with other nations; their perceptions of themselves and of each other; their use of power to achieve their objectives. Issues facing the U.S. and the world community. (C-ID POLS 140) (A, CSU-GE, UC, I)

25 MODEL UNITED NATIONS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Preparation for simulated United Nations conferences. Focus on international diplomacy through study of member countries and their national policies. Practice on speech, debate, negotiation, and writing techniques. Students will be expected to attend at least two Model United Nations conferences during the semester. (A, CSU)

110 AMERICAN INSTITUTIONS
3 units, 3 lecture hours, (Formerly Political Science 10)
ADVISORY: Eligibility for English 125 and 126.
Current problems of American and California government. Federal, state and local institutions. Does not satisfy the U.S. Constitution and California state and local requirements for a BA degree under Section 40404. Satisfies Fresno City College graduation requirement. (A)

PRINTING TECHNOLOGY (PT)
SEE GRAPHIC COMMUNICATIONS

PSYCHOLOGY (PSY)

2 GENERAL PSYCHOLOGY
3 units, 3 lecture hours, (Formerly Psychology 7)
ADVISORY: Eligibility for English 1A is recommended.
Scientific study of behavior and mental processes. Topics include history, methodology, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, psychopathology and therapy, stress and health, and social and cultural influences. (C-ID PSY 110) (A, CSU-GE, UC, I)
2H  HONORS GENERAL PSYCHOLOGY
3 units, 3 lecture hours, (Formerly Honors 7P and Psychology 7H)
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.
Scientific study of behavior and mental processes. Topics include history, methodology, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, psychopathology and therapy, stress and health, and social and cultural influences. The Honors section of this course places a greater emphasis on understanding the human being as an integrated physiological, social, and psychological organism and further enriches that perspective with data and theories from related disciplines. (C-ID PSY 110) (A, CSU-GE, UC, I)

5  SOCIAL PSYCHOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Systematic analysis of the social determinants of human behavior and mental processes. Focus on the mutual influence between the individual and the social environment. Emphasized topics include social perception, social cognition, attitudes, persuasion, conformity and obedience, attraction, gender roles, prosocial behavior, aggression, prejudice and discrimination, group phenomena, and cultural norms. (C-ID PSY 170) (A, CSU, UC)

12  CHILD ABUSE
3 units, 3 lecture hours, (See also Child Development 12)
ADVISORY: Eligibility for English 1A recommended.

16  ABNORMAL PSYCHOLOGY
3 units, 3 lecture hours
ADVISORY: Psychology 2 and eligibility for English 1A recommended.
Psychological, sociocultural, and biological bases of abnormal behavior. Definitions of abnormality; current models of etiology, classification, therapy, and prevention; critical analysis of research techniques and findings. (C-ID PSY 120) (A, CSU, UC)

18  CRIMINAL PERSONALITIES
3 units, 3 lecture hours, (See also Criminology 18)
ADVISORY: Eligibility for English 1A recommended.
Focus on the physiological, cognitive, and social factors involved in crime and the development of criminal personalities. An examination of an offender’s expectations, rationalizations, and justifications for his/her criminal behavior. Emphasis on modern concepts of criminal personalities including sociopaths, psychopaths, and criminal psychopaths. The role of corrections at the federal, state, and local levels. Treatment classifications and management of the criminal personality, including sociopaths and psychopaths, within institutional settings. (A, CSU)

25  HUMAN SEXUALITY
3 units, 3 lecture hours
ADVISORY: Psychology 2 and eligibility for English 1A recommended.
Sexual behaviors and values in contemporary society from a biological, psychological, social, cultural, historical and lifespan perspective. Anatomy and physiology of sex, gender development and socialization, contraception and abortion, conception and prenatal development, sexual orientation, love and communication, sexual patterns and techniques, sexual dysfunctions, sexually transmitted diseases, and the consequences of sexual victimization. Presented in an explicit and scientific manner. (C-ID PSY 130) (A, CSU-GE, UC)

33  PERSONAL AND SOCIAL ADJUSTMENT
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The psychology of effective and ineffective coping patterns. Topics include personality, lifespan development, psychological factors of physical health and illness, stress, gender roles, interpersonal relationships, work and leisure, psychological disorders, and therapy. These topics will be explored with an emphasis on both theory and practical application in everyday life. (C-ID PSY 115) (A, CSU-GE, UC)

36  BIOLOGICAL PSYCHOLOGY
3 units, 3 lecture hours
PREREQUISITE: Psychology 2. ADVISORY: Biology 3 or 5, and eligibility for English 1A recommended.
Biological mechanisms central to fundamental concepts and issues of psychology. Topics include basic neuroanatomy and neurophysiology, genetics, research methods in biological psychology; the physiological mechanisms underlying sensation, perception, motivation, emotion, stress, sexual behavior, hunger, eating, language, intelligence, learning memory, neurological disorders, psychopharmacology, and psychological disorders; and the biology of behavior within the context of society. (C-ID PSY 150) (A, CSU, UC)
38 LIFESPAN DEVELOPMENT
3 units, 3 lecture hours, (See also Child Development 38)
ADVISORY: Eligibility for English 1A recommended.
Basic theories, research concepts, and principles of typical and atypical physical, cognitive and psychosocial development at each major stage of life from conception to death. All major topics of human development (e.g. human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying) presented in an integrated manner. (C-ID PSY 180) (A, CSU-GE, UC, I)

39 CHILD GROWTH AND DEVELOPMENT
3 units, 3 lecture hours, 1 lab hour, (See also Child Development 39)
ADVISORY: Eligibility for English 1A recommended. Verification of freedom from tuberculosis is recommended.
Basic theories, research, concepts, and principles of physical, cognitive, and psychosocial development at each major stage of life from conception through adolescence. Emphasis on environmental and genetic influences on typical and atypical development. The "To Be Arranged" hours may include observation and documentation of children at various stages of development. (C-ID CDEV 100) (A, CSU-GE, UC, I)

42 STATISTICS FOR THE BEHAVIORAL SCIENCES
4 units, 4 lecture hours, (See also Mathematics 42)
PREREQUISITE: Mathematics 103 or equivalent. ADVISORY: Eligibility for English 1A recommended.
Descriptive statistics, sampling, hypothesis testing, estimation, selected non-parametric techniques, ANOVA, and regression, with applications from psychology, biology, and social sciences. This course is designed for psychology majors and UC transfars. (A, CSU-GE, UC, I)

45 INTRODUCTION TO RESEARCH METHODS IN PSYCHOLOGY
3 units, 3 lecture hours
PREREQUISITE: Psychology 2 or 2H and Psychology 42 or Mathematics 42 or Mathematics 11. ADVISORY: English 1A or 1AH.
Survey of psychological research methods. Emphasis placed on research design, descriptive techniques, experimental procedures, and the characteristics of valid assessment tools. Focus on the collection, analysis, interpretation, and reporting of research data. Cultural considerations and the ethics of research with humans and animals included. Designed for psychology majors and others who require familiarity with such research techniques. (C-ID PSY 200) (A, CSU, UC)

RADIOLOGIC TECHNOLOGY (RAD)

1A FUNDAMENTALS OF RADIOLOGIC TECHNOLOGY
6 units, 6 lecture hours
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1B, 1C, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Radiography and its relation to radiology and the hospital; X-ray production, darkroom chemistry, radiographic quality, medical ethics, and use of X-ray equipment. (A, CSU)

1B BASIC RADIOGRAPHIC POSITIONING LABORATORY
1 unit, 3 lab hours
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1C, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Demonstration and practice in positioning of the chest, abdomen, upper and lower extremities, and shoulder girdle. (A, CSU)

1C CLINICAL ORIENTATION LABORATORY
3 units, 9 lab hours, (Formerly Radiologic Technology 3A)
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1D. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Practice of the applicable rules and regulations of the clinical facility. Assist with basic radiographic procedures. (A, CSU)

1D NURSING PROCEDURES IN RADIOLOGIC TECHNOLOGY
3 units, 3 lecture hours
PREREQUISITE: Admission to the Radiologic Technology Program; Applied Technology 11; Biology 24 or Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1C. ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.
Procedures and methods pertaining to X-ray, emergency patients, and surgical procedures. (A, CSU)
2A RADIATION BIOLOGY
6 units, 6 lecture hours
PREREQUISITE: Radiologic Technology 1A, 1B, 1C and 1D.
COREQUISITE: Radiologic Technology 2B, 2C, and 2D.
Biological effects of radiation, protection standards, personnel monitoring, and concepts of radiation units. (A, CSU)

2B ADVANCED RADIOGRAPHIC POSITIONING LABORATORY
1 unit, 3 lab hours
PREREQUISITE: Radiologic Technology 1A, 1B, 1C and 1D.
COREQUISITE: Radiologic Technology 2A, 2C, and 2D.
Demonstration and practice in positioning of the pelvis and upper femora, vertebral column, boney thorax, digestive system, gallbladder, biliary ducts, urinary system and mammography. (A, CSU)

2C CLINICAL OBSERVATION LABORATORY
3 units, 9 lab hours
PREREQUISITE: Radiologic Technology 1A, 1B, and 1D. COREQUISITE: Radiologic Technology 2A, 2B, and 2D.
Practice of the applicable rules and regulations of the clinical facility. Under direct supervision, perform basic radiographic procedures. (A, CSU)

2D QUALITY ASSURANCE IN RADIOLOGIC TECHNOLOGY
1 unit, 3 lab hours
PREREQUISITE: Radiologic Technology 1A, 1B, 1C, and 1D.
COREQUISITE: Radiologic Technology 2A, 2B, and 2C.
Evaluation of radiographic systems to assure consistency in the production of quality images. Fulfills the computer literacy graduation requirement for Radiologic Technology majors only. (A, CSU)

3 BASIC CLINICAL RADIOLOGIC TECHNOLOGY
8 units, 24.45 lab hours, (Summer only), (Formerly Radiologic Technology 3B)
PREREQUISITE: Radiologic Technology 2A, 2B, 2C, and 2D.
Basic radiographic positioning and fluoroscopy. Supervised clinical experience in local hospital radiology departments. (A, CSU)

4A PATHOLOGY IN RADIOLOGIC TECHNOLOGY
2 units, 2 lecture hours
PREREQUISITE: Radiologic Technology 3. COREQUISITE: Radiologic Technology 4B and 4C.
Abnormal conditions of patients that preclude routine radiography; pathological conditions that need recognition and special treatment by radiologic technologists. (A, CSU)

4B ADVANCED CLINICAL RADIOLOGIC TECHNOLOGY
12 units, 36 lab hours
PREREQUISITE: Radiologic Technology 3. COREQUISITE: Radiologic Technology 4A and 4C.
Advanced radiographic exposure and positioning; procedures in medical-surgical conditions. (A, CSU)

4C ADVANCED RADIOGRAPHIC POSITIONING LABORATORY-CRANIUM
1 unit, 3 lab hours
PREREQUISITE: Radiologic Technology 3. COREQUISITE: Radiologic Technology 4A and 4B.
Demonstration and practice in positioning of the skull, facial bones, nasal bones, zygomatic arches, mandible, paranasal sinuses and temporal bones for radiographic examination. (A, CSU)

5A SPECIAL PROCEDURES IN RADIOLOGIC TECHNOLOGY
2 units, 2 lecture hours
PREREQUISITE: Radiologic Technology 4A, 4B, and 4C.
Special procedures for diagnostic purposes and equipment maintenance. (A, CSU)

5B SPECIALIZED CLINICAL RADIOLOGIC TECHNOLOGY
12 units, 36 lab hours
PREREQUISITE: Radiologic Technology 4A, 4B, and 4C.
Special procedures for diagnostic purposes; exposure to new imaging modalities. (A, CSU)

5C FLUOROSCOPY
2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: Radiologic Technology 4A, 4B, and 4C.
Fluoroscopy techniques including positioning the patient, selecting exposure factors and positioning fluoroscopy equipment. (A, CSU)

106 CONCENTRATED CLINICAL RADIOLOGIC TECHNOLOGY
4 units, 13 lab hours
PREREQUISITE: Radiologic Technology 5A, 5B, and 5C.
Concentrated clinical experience to develop proficiency in all aspects of diagnostic radiography. (A)
REAL ESTATE (RE)

Certain real estate courses offered by the college presently meet the course requirements imposed by the California Department of Real Estate in order to take the real estate salesperson and/or broker examination. However, these courses are not intended as licensing test preparation courses. The course requirements applicable to these examinations may be viewed at the California Department of Real Estate website www.dre.ca.gov.

40 REAL ESTATE PRINCIPLES
3 units, 3 lecture hours, (Formerly Real Estate 50)
ADVISORY: Eligibility for English 1A recommended.
California real estate history, real property descriptions, public and private restriction terminology, agency and contracts, forms, licensure, and careers in real estate. (A, CSU)

41 REAL ESTATE PRACTICE
3 units, 3 lecture hours, (Formerly Real Estate 51)
PREREQUISITE: Real Estate 40 or hold a license as a real estate salesperson or broker in California.
Day-to-day operations affecting brokers and sales persons, listings, advertising and marketing techniques. (A, CSU)

RECREATION (REC)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to occupational work experience. Summer Session: Enrollment in another college course is optional. Supervised employment directly related to the student’s major. Offered under specific majors.
Supervised employment extending the classroom based on occupational learning related to recreation. Collaborative learning objectives established specific to recreation. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of 8 units per semester. Maximum 16 units total. Orientation hours may be required. (A, CSU)

20 INTRODUCTION TO RECREATION
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Educational opportunities; federal, state, and local relationships; planning programs; finance, and leadership. (A, CSU)

21 RECREATION LEADERSHIP
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Theoretical and philosophical basis for leadership. Social dynamics of participation in recreation activities. (A, CSU)

23 OUTDOOR RECREATION
3 units, 2 lecture hours, 3 lab hours
COREQUISITE: Recreation 20.
History, development, principles and trends of organized camping, nature and conservation, and outdoor recreation. Laboratory and field trips, including camping and hiking activities. Practical skills in firecrafts, outdoor cooking, and backpacking. Leadership training in camp counseling. Required for recreation majors. (A, CSU)

RESPIRATORY CARE PRACTITIONER (RCARE)

16 PATIENT ASSESSMENT
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Acceptance into the Respiratory Care Program. Basic cardiopulmonary assessment of patients with acute and chronic issues through the use of diagnostic tools and techniques. (A, CSU)

16B DIAGNOSTIC METHODS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Respiratory Care 16. COREQUISITE: Respiratory Care 17 and 20.
Diagnostic tools and techniques to obtain quantitative information for patient assessment. (A, CSU)

17 RESPIRATORY CARE PHARMACOLOGY
3 units, 3 lecture hours
PREREQUISITE: Respiratory Care 16. COREQUISITE: Respiratory Care 16B and 20. ADVISORY: English 1A.
Concepts and principles of pharmacology agents required in the practice of respiratory care including medications, dosages, route of administration, delivery devices, therapeutic efficacy, and adverse reactions. (A, CSU)

18 PHYSIOLOGY OF THE RESPIRATORY SYSTEM
3 units, 3 lecture hours
PREREQUISITE: Respiratory Care 16B, 17, and 20. COREQUISITE: Respiratory Care 21.
Physiological principles of the cardiopulmonary system including: gas diffusion, transport of oxygen and carbon dioxide, mechanics and neural control of ventilation, pulmonary blood flow and perfusion, acid-base regulation, and hemodynamics. (A, CSU)
20  INTRODUCTION TO RESPIRATORY CARE
5.5 units, 5 lecture hours, 2 lab hours
PREREQUISITE: Respiratory Care 16. COREQUISITE: Respiratory Care 16B and 17. ADVISORY: English 1A.
Selected modalities for respiratory care with the physical, mechanical, and scientific principles associated with all attendant equipment. (A, CSU)

21  APPLICATIONS AND PROCEDURES IN RESPIRATORY CARE
10 units, 9 lecture hours, 3 lab hours
PREREQUISITE: Respiratory Care 16B. COREQUISITE: Respiratory Care 18.
Selected therapeutic and diagnostic modalities for respiratory care, with the physical, mechanical and scientific principles associated with all attendant equipment. Mechanical ventilation (theory and applications), sustained maximal inspiration, pulmonary function testing and chest physiotherapy. Supervised clinical performance in area hospitals. (A, CSU)

21B  SIMULATION LAB SKILLS
1 unit, 3 lab hours
PREREQUISITE: Respiratory Care 18 and 21. COREQUISITE: Respiratory Care 22 and 24.
Therapeutic and diagnostic modalities with use of simulation equipment to prepare the student for supervised clinical rotations in the intensive care unit. (A, CSU)

22  CLINICAL APPLICATIONS AND VENTILATOR MANAGEMENT IN RESPIRATORY CARE I
8 units, 2 lecture hours, 18 lab hours
PREREQUISITE: Respiratory Care 18 and Respiratory Care 21. COREQUISITE: Respiratory Care 21B and Respiratory Care 24.
Fully supervised clinical experience of the student respiratory care practitioner with didactic concentration on management of patients requiring ventilator support. (A, CSU)

23  CLINICAL APPLICATIONS IN RESPIRATORY CARE II
8 units, 2 lecture hours, 18 lab hours
PREREQUISITE: Respiratory Care 21B, 22 and 24. COREQUISITE: Respiratory Care 25.
Fully supervised clinical experience of the student respiratory care practitioner, in the intensive care setting. Selected computer clinical simulations for exit-testing are integrated with a computer-based research paper. Fulfills the computer literacy graduation requirement for Respiratory Care Practitioner majors only. (A, CSU)

24  NEONATAL AND PEDIATRIC DISEASES
2 units, 2 lecture hours
PREREQUISITE: Respiratory Care 18 and 21. COREQUISITE: Respiratory Care 21B and 22.
Pathology, etiology, and management of neonatal and pediatric disorders, including normal and abnormal fetal development. (A, CSU)

25  RESPIRATORY DISEASE
2 units, 2 lecture hours, (Spring)
PREREQUISITE: Respiratory Care 21B and 24. COREQUISITE: Respiratory Care 23.
The pathology, etiology and management of respiratory diseases and trauma. (A, CSU)

RETAILING FASHION
SEE FASHION MERCHANDISING

SOCIAL SERVICE
SEE HUMAN SERVICES (HS)

SOCIOLOGY (SOC)

1A  INTRODUCTION TO SOCIOLOGY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social structure, culture, socialization, the self and social interaction, group dynamics, institutions, deviance, stratification, social change, social problems, and global dynamics. (C-ID SOCI 110) (A, CSU-GE, UC, I)

1AH HONORS INTRODUCTION TO SOCIOLOGY
3 units, 3 lecture hours
ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in college catalog.
Basic concepts, theoretical approaches, and methods of sociology. Analysis and explanation of social structure, culture, socialization, the self and social interaction, group dynamics, institutions, deviance, stratification, social change, social problems, and global dynamics. Places a greater emphasis than SOC 1A on methods of conducting scientific research in the field of sociology. Additional emphasis is placed on contemporary social issues as explored through supplemental readers or texts. (C-ID SOCI 110) (A, CSU-GE, UC, I)
1B CRITICAL THINKING ABOUT SOCIAL PROBLEMS
3 units, 3 lecture hours
ADVISORY: English 1A and Sociology 1A or 1AH.
An identification and analysis of contemporary social problems including causes, consequences and possible solutions. Explanation of theoretical perspectives used to explain social problems. Consideration of sociological methods of research and analysis. Application of critical thinking skills, specifically taught in the course, designed to result in heightened critical thinking ability as well as strengthened social awareness. (C-ID SOCI 115) (A, CSU-GE, UC)

2 AMERICAN MINORITY GROUPS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Overview of sociological, institutional, demographic, and social-psychological aspects of ethnicity and race. Examination of non-dominant groups in the United States. (C-ID SOCI 150) (A, CSU-GE, UC)

5 SOCIOLOGY OF RAPE
3 units, 3 lecture hours, (See also Women’s Studies 5)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro overview of rape including the history of rape, a study of what creates a rape culture, social and psychological characteristics and pathology of rapists, sociological impact upon and psychology of the survivor. Includes examination of various forms of sexual assault such as acquaintance rape, marital rape, male rape, gang rape and child sexual assault. The sociological foundation and history of current laws and their execution are also explored. (A, CSU, UC)

7 DOMESTIC VIOLENCE: ABUSE WITHIN THE FAMILY
3 units, 3 lecture hours, (See also Women’s Studies 7)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro study of the historical and contemporary problem of domestic violence. Overview of the battered spouse syndrome, characteristics of the survivor and the batterer, therapeutic approaches and development of legislation. Various forms of domestic violence such as child abuse, elder abuse, and violence in same gender relationships are also studied. (A, CSU, UC)

10 INTRODUCTION TO AGING STUDIES
3 units, 3 lecture hours, (See also Human Services 10), (Formerly Sociology 22)
ADVISORY: Eligibility for English 1A recommended.
Overview of social, economic, biological and psychological functions of aging. Exploration of issues of the aged with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

14 SOCIOLOGY OF THE MEXICAN AMERICAN COMMUNITY
3 units, 3 lecture hours, (See also Chicano-Latino Studies 14)
ADVISORY: Eligibility for English 1A recommended.
Sociological examination of the Chicano-Latino in American society: family, religion, education, social class, gender, and political and social institutions. Emphasis on social problems, social issues, and social change. (A, CSU, UC)

31 THE CHILD IN SOCIETY: A SOCIAL PROBLEMS APPROACH
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Explores personal and social aspects contributing to the relationships and social problems facing children: socialization, the dysfunctional family, abuse, deprivation, disabilities and special needs, drugs, delinquency and sexuality. (A, CSU)

32 INTRODUCTION TO MARRIAGE AND FAMILY
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Sociological analysis of marriage and the family, including historical and contemporary changes, and the socio-cultural and economic forces shaping these changes. Topics may include but are not limited to: love, courtship, mate selection, sexuality, family planning, pregnancy and childbirth, sexually transmitted diseases, family conflict, conflict resolution, communication skills, divorced families, step-families, aging and widowhood. (C-ID SOCI 130) (A, CSU-GE, UC)
SPANISH
SEE FOREIGN LANGUAGES

SPECIAL STUDIES

47  (COURSE TITLE TO BE SELECTED)
0.5-5 units, 0-5 lecture hours, 0-15 lab hours, 9 lecture hour equivalents per 1/2 unit of credit
ADVISORY: Eligibility for English 1A recommended.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible within the regular offerings. Designed for transfer credit. Some topics may be repeatable. Units and hours to be determined. (A, CSU, UC approved as variable topics; evaluation completed by individual campuses after admission.)

177 (COURSE TITLE TO BE SELECTED)
0.5-10 units, 0-10 lecture hours, 0-30 lab hours, 9 lecture hour equivalents per 1/2 unit of credit, (Formerly Special Studies 77)
PREREQUISITE: To be determined.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with the regular course offerings. Designed for degree applicable, nontransfer credit. Some topics may be repeatable. Units and hours to be determined. (A)

277 (COURSE TITLE TO BE SELECTED)
0.1-15 units, 0-15 lecture hours, 0-45 lab hours, 9 lecture hour equivalents per 1/2 unit of credit, (Formerly Special Studies 77)
PREREQUISITE: To be determined.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with regular offerings. Designed for nondegree, nontransfer credit. Units and hours to be determined.

377 (COURSE TITLE TO BE SELECTED)
1-40 lecture hours, 1-40 lab hours, (Pass/No Pass), (Open Entry, Open Exit), (Formerly Special Studies 77)
PREREQUISITE: To be determined.
Current topics of importance and concern in a designated subject field or on topics not covered in the regular curriculum or which need to be covered in greater depth than is possible with the regular offerings. Designed for noncredit. 0 unit, lecture hours and lab hours to be determined.

SPEECH (SPEECH)
SEE COMMUNICATIONS

SUPERVISED TUTORING (ST)
FORMERLY BASIC STUDIES AND INDIVIDUALIZED LEARNING

300 SUPERVISED TUTORING
Lab hours arranged, (Repeats = 3),
(Formerly Supervised Tutoring 100)
PREREQUISITE: None.
Provides tutoring assistance to increase the probability of a student's successful completion of his or her educational objectives. Hours will vary depending upon individual student need.

THEATRE ARTS (TA)

12 FUNDAMENTALS OF ORAL INTERPRETATION
3 units, 3 lecture hours, (See also Communication 12)
ADVISORY: Eligibility for English 1A recommended.
An introduction to performance studies; analysis, appreciation, and application of theories of interpretive performance of various forms of literature including poetry, prose, and drama. (A, CSU-GE, UC)

15C CREATIVE WRITING: PLAYWRITING
3 units, 3 lecture hours, (See also English 15C)
PREREQUISITE: English 1A or the equivalent.
Analysis and writing of plays for critical review. (A, CSU, UC)

23 TECHNICAL THEATRE PRACTICUM
3 units, 1 lecture hour, 6 lab hours
ADVISORY: Eligibility for English 1A recommended.
Application of production responsibilities in one or more of the following areas: stage management, house management, construction, scenery, properties, costumes, lighting, sound, and running crew. Students will serve on the crew for a department production. Some night and weekend hours may be required. (C-ID THTR 192) (A, CSU, UC)
25  STAGECRAFT  
3 units, 3 lecture hours, (Formerly Theatre Arts 34A)  
ADVISORY: Eligibility for English 1A recommended.  
Introduction to technical theatre and the creation of scenic elements. Includes basic introduction to design, construction, set movement, props, backstage organization, stage management, lighting equipment, and sound. Discussion of career possibilities. (C-ID THTR 171) (A, CSU, UC)

27A  INTRODUCTION TO SCENIC DESIGN  
3 units, 3 lecture hours, 1 lab hour,  
(Formerly Theatre Arts 39, 40, and 41)  
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.  
Designing and drafting scenery for the theatre. Ground plans, section drawings, elevations, and scenic models are emphasized. (A, CSU, UC)

27B  INTRODUCTION TO LIGHTING DESIGN  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Eligibility for English 1A and Mathematics 201 recommended.  
Study and execution of lighting for the theatre. Equipment control lighting plots; color theory; photo-metrics and cueing are emphasized. (C-ID THTR 173) (A, CSU, UC)

28  INTRODUCTION TO STAGE MAKEUP  
3 units, 2 lecture hours, 3 lab hours,  
(Formerly Theatre Arts 37)  
ADVISORY: Eligibility for English 1A and recommended.  
Introduction to methods of designing and applying makeup for theatrical use. Instruction and practice in a lecture/laboratory setting.  
(C-ID THTR 175) (A, CSU, UC)

29A  ADVANCED TECHNICAL THEATRE PRACTICUM I  
1 unit, 3 lab hours  
PREREQUISITE: Theatre Arts 23.  
Topics in more advanced technical theatre, and stage crew leadership. Students may specialize in one or more of the following areas (with instructor approval): Scenery, Properties, Costumes, Make Up, Lighting, Sound, Special Effects. (A, CSU, UC)

29B  ADVANCED TECHNICAL THEATRE PRACTICUM II  
1 unit, 3 lab hours  
PREREQUISITE: Theatre Arts 29A.  
Topics in advanced technical theatre beyond the scope of TA29A. Students may specialize in one or more of the following areas (with instructor approval): Scenery, Properties, Costumes, Make Up, Lighting, Sound, Special Effects. (A, CSU, UC)

30  THEATRE APPRECIATION  
3 units, 3 lecture hours  
ADVISORY: Eligibility for English 1A recommended.  
An introduction to the Theatre with emphasis on the theatre as an exciting artistic and social experience. Designed for the general student.  
(C-ID THTR 111 AND THTR 112) (A, CSU-GE, UC, I)

31  THEATRE HISTORY AND DRAMATIC LITERATURE I  
3 units, 3 lecture hours, (Formerly Theatre Arts 32A)  
ADVISORY: Eligibility for English 1A recommended.  
Survey of the theatre history and dramatic literature of Western culture from Ancient Greeks through 18th Century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time.  
(C-ID THTR 113) (A, CSU-GE, UC, I)

32  THEATRE HISTORY AND DRAMATIC LITERATURE II  
3 units, 3 lecture hours, (Formerly Theatre Arts 32B)  
ADVISORY: Eligibility for English 1A recommended.  
Survey of the theatre history and dramatic literature of Western culture from 19th century to the present.  
(A, CSU-GE, UC, I)

35  COSTUME CRAFTS  
3 units, 3 lecture hours, (Formerly Theatre Arts 35A)  
ADVISORY: Eligibility for English 1A recommended.  
Techniques used for costume and costume accessory construction.  
(A, CSU, UC)

36  COSTUME DESIGN  
3 units, 3 lecture hours, (Formerly Theatre Arts 35B)  
ADVISORY: English 1A recommended.  
Introduction to the creation of costumes for the stage. The study of costume history, design and basic construction techniques. Fabrics and their various uses will be investigated. (C-ID THTR 174) (A, CSU, UC)
38  SCRIPT ANALYSIS
   3 units, 3 lecture hours
   ADVISORY: Eligibility for English 1A recommended.
   Principles, theories and techniques of play script analysis for
   theatrical production. Fully explore an in-depth methodology of reading,
   analyzing and understanding play scripts in a variety of genres and styles
   intended for production. Investigate techniques used to determine how
   to read a play for its’ structure, scrutinizing the playwright’s methods of
   creating theatre through plot, character and imagery, and understanding
   what scripts “mean” to the professional theatre artist and theatre-goer as
   distinct from other forms of literature. (C-ID THTR 114) (A, CSU, UC)

39A  INTERMEDIATE CREW PRACTICUM I
    1 unit, 3 lab hours
    PREREQUISITE: Theatre Arts 23.
    Allows students to explore more advanced or different positions
    as part of a theatrical stage crew. (A, CSU, UC)

39B  INTERMEDIATE CREW PRACTICUM II
    1 unit, 3 lab hours
    PREREQUISITE: Theatre Arts 39A.
    Leadership roles on a theatrical crew. (A, CSU, UC)

40  PERFORMANCE PRACTICUM
    3 units, 1 lecture hour, 6 lab hours,
    (Repeats = 3)
    ADVISORY: Eligibility for English 1A recommended.
    Rehearsal and performance of plays for public presentation. Credit
    given for the performance of acting roles, stage management, direction
    or assistant direction of a Fresno City College theatre production. Par­
    ticipation in a Fresno City College theatre production required. (C-ID
    THTR 191) (A, CSU)

41  BEGINNING ACTING
    3 units, 3 lecture hours, (Formerly Theatre
    Arts 31A)
    ADVISORY: Eligibility for English 1A recommended.
    Apply basic acting theory to performance and develop the skills of
    interpretation of drama through acting. Special attention is paid to skills
    for performance: memorization, stage movement, vocal production, and
    interpretation of text. Not open to students enrolled in Theatre Arts 42.
    (C-ID THTR 151) (A, CSU, UC)

42  BEGINNING ACTING FOR THEATRE
    MAJORS
    3 units, 2 lecture hours, 4 lab hours
    ADVISORY: Eligibility for English 1A recommended.
    Designed for theatre arts majors stresses acting technique, char­
    acter building, and scene monologue performance, and scene analysis
    from selected plays from Modern Realism. Not open to students currently
    enrolled in Theatre Arts 41. (C-ID THTR 151) (A, CSU, UC)

43  INTERMEDIATE ACTING
    3 units, 3 lecture hours, (Formerly Theatre
    Arts 31B)
    PREREQUISITE: Theatre Arts 41 or 42. ADVISORY: Eligibility for
    English 1A recommended.
    Improvisation, body movement, character development; class
    exercises to develop voice for the stage, classical and contemporary,
    monologues and scene study with class performance. (C-ID THTR 152)
    (A, CSU, UC)

44A  ACTORS WORKSHOP
    3 units, 2 lecture hours, 3 lab hours,
    (Formerly Theatre Arts 38A and 38B, 38, and
    44)
    PREREQUISITE: Theatre Arts 41 or 42. ADVISORY: Theatre Arts
    43. Eligibility for English 1A recommended.
    Skill development for actors with intermediate acting experience.
    Explores elements of performance styles, scene work of classical and
    contemporary materials and auditioning techniques. (A, CSU-GE, UC)

44B  ACTORS WORKSHOP 2
    3 units, 2 lecture hours, 3 lab hours
    PREREQUISITE: Theatre Arts 44A. ADVISORY: Eligibility for
    English 1A recommended.
    Skill development for actors with advanced acting experience.
    Explores elements of performance styles, scene work of classical and
    contemporary materials and auditioning techniques. Memorization skills
    required. (A, CSU, UC)

45  KENNEDY CENTER AMERICAN COLLEGE
    THEATER FESTIVAL TOPICS
    2 units, 2 lecture hours, 4 lab hours, (9
    weeks), (Repeats = 3)
    PREREQUISITE: Student must either be selected by Kennedy
    Center American College Theater Festival adjudicators for participation
    in the festival, or be approved by the instructor to attend.
    Preparation of theatre students for attendance at the Kennedy
    Center American College Theater Festival. Participation in master classes
    and participation/attendance at adjudication/competition events. (A,
    CSU)

46  VOICE FOR THE ACTOR
    3 units, 3 lecture hours
    ADVISORY: Eligibility for English 1A recommended.
    Principles of the use of voice and speech for stage performance
    including Standard American Speech (IPA), diaphragmatic breath con­
    trol, relaxation techniques, enunciation, articulation, projection, vocal
    characterization, vocal energy imagination and visualization in creating
    artistic and authentic self expression. (A, CSU, UC)
48A TEASERS I
0.5 unit, 0.25 lecture hour, 2 lab hours
(Formerly Theatre Arts 48)
ADVISORY: Eligibility for English 1A recommended.
Creation, rehearsal and performance of new plays for public presentation. Participation in a Fresno City College theatre production of Teasers is required. (A, CSU)

48B TEASERS II
0.5 unit, 0.25 lecture hour, 2 lab hours,
(Formerly Theatre Arts 48)
ADVISORY: Eligibility for English 1A recommended.
Techniques for collaborative work on the creation, rehearsal and performance of new plays for public presentation. Participation in a Fresno College production of Teasers is required. (A, CSU)

49 INTRODUCTION TO THEATRE DESIGN
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
A survey of scenery, sound, costumes, makeup, properties, theatrical equipment and construction techniques through demonstration, and laboratory experience. Information is application to all formal theatrical applications. (A, CSU)

200 MOVEMENT FOR THE PRODUCTION THE LITTLE PRINCE
2 units, 1 lecture hour, 3 lab hours
COREQUISITE: Theatre Arts 40.
Prepare students for character movement and/or dance for production.

346 SENIOR MUSICAL PERFORMANCE SKILLS
3 lab hours, (Unlimited Repeats), (Pass/No Pass)
PREREQUISITE: Students must meet the minimum age requirements to audition for “New Wrinkles.”
Skill-building in musical theatre such as chorus, small ensemble, and/or solo singing. Intended to help students considering auditioning and performing in the annual “New Wrinkles” production at Fresno City College.

347 SENIOR MUSICAL THEATRE SKILLS
3 lab hours, (Unlimited Repeats), (Pass/No Pass)
PREREQUISITE: Students must meet the minimum age requirements to audition for “New Wrinkles.”
Skill-building in musical theatre such as dancing and/or acting. Intended to help students considering auditioning and performing in the annual “New Wrinkles” production at Fresno City College.

348 SENIOR PLAY PRODUCTION
1 lecture hour, 9 lab hours, (16 weeks),
(Unlimited Repeats), (Formerly Theatre Arts 80)
ADVISORY: Theatre Arts 347.
Organize, write, cast, rehearse, and perform a major seniors’ musical variety show for public performance.

VOCATIONAL ENGLISH AS A SECOND LANGUAGE (VESL)

167W APPLIED ADVANCED WRITING FOR COLLEGE AND CAREERS
4 units, 4 lecture hours, (Formerly Vocational English as a Second Language 269W)
PREREQUISITE: English for Multi-Lingual Students 265W, or designated score on the placement test, or completion of Vocational English as a Second Language 265W. Use of language other than English as primary language.
Advanced writing, grammar, critical thinking and study skills applied to tasks for various career fields. Emphasis on a broad range of professional communication genres. Acquisition and application of syntactic, lexical and grammatical rules. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and the use of technological resources. (A)

168R APPLIED ADVANCED READING FOR COLLEGE AND CAREERS
4 units, 4 lecture hours, (Formerly Vocational English as a Second Language 269R)
PREREQUISITE: English for Multi-Lingual Students 265R, or designated score on the placement test, or completion of Vocational English as a Second Language 265R. Use of language other than English as primary language.
Advanced reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through the use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing, and the use of technological resources. (A)
180RW APPLIED ADVANCED READING AND WRITING FOR COLLEGE AND CAREERS
3 units, 3 lecture hours
PREREQUISITE: Vocational English as a Second Language 265R and 265W.
Advanced reading, vocabulary, writing, grammar, critical thinking and study skills applied to tasks for various career fields. Reading strategies reinforced through the use of workplace materials and other texts. Emphasis on a broad range of professional communication genres, as well as acquisition and application of syntactic, lexical and grammatical rules. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and the use of technological resources. (A)

265R APPLIED INTERMEDIATE READING FOR COLLEGE AND CAREERS
4 units, 4 lecture hours, (Pass/No Pass), (Formerly Vocational English as a Second Language 266R)
PREREQUISITE: English for Multi-Lingual Students 264R or designated score on the placement test. Use of language other than English as primary language.
Intermediate reading, vocabulary, critical thinking and study skills applied to tasks for a variety of career fields. Reading strategies reinforced through use of workplace materials and other texts. Acquisition and effective use of workplace vocabulary. Course content includes: teamwork, problem solving, critical thinking, organizational and research skills, self-editing and the use of technological resources.

265W APPLIED INTERMEDIATE WRITING FOR COLLEGE AND CAREERS
4 units, 4 lecture hours, (Pass/No Pass), (Formerly Vocational English as a Second Language 266W)
PREREQUISITE: English for Multi-Lingual Students 264W or designated score on the placement test. Use of language other than English as primary language.
Intermediate writing, grammar, critical thinking and study skills applied to tasks for various career fields. Focus on a broad range of professional communication genres. Acquisition and application of appropriate syntactic and semantic elements. Course content includes: problem solving, teamwork, critical thinking, organizational and research skills, self-editing and use of technological resources.

WELDING TECHNOLOGY (WELD)

1 EXPLORING WELDING/METALS
3 units, 2 lecture hours, 3 lab hours, (Formerly Industrial Education 5)
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.
An introduction to oxyacetylene and plasma cutting. Shielded metal arc welding (SMAW) and gas metal arc welding (GMAW) in the flat and horizontal positions, along with other methods of joining steel together. An emphasis is placed on safety and developing good manipulative skills. (A, CSU)

2A INTRODUCTION TO WELDING TECHNOLOGY
6 units, 4 lecture hours, 6 lab hours
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.
Oxyacetylene cutting, shielded metal arc, gas metal arc (MIG), Flux Cored Arc Welding (FCAW) and gas tungsten arc (TIG) welding. An emphasis on good manipulative welding skills for joining steel, stainless steel and aluminum. Use of various electrodes. An introduction to the electrode and base metal classification system. (A, CSU)

2B ADVANCED MULTI-PROCESS WELDING
5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Welding Technology 2A.
Vertical and overhead welding with the shielded metal arc process leading to the American Welding Society (AWS) Structural Welding Code 3G and 4G Unlimited Certification Test. Advanced welding skills with gas metal arc (MIG), fluxed cored (FCAW) and gas tungsten arc (TIG). (A, CSU)

3A WELDING DESIGN AND FABRICATION
5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Computer Aided Drafting and Design 16 and Welding 2B. ADVISORY: Drafting 12 recommended.
Design and fabrication of metal projects by welding. Manufacturing processes, production techniques, and material cost estimation. (A, CSU)

3B INTERMEDIATE WELDING DESIGN AND FABRICATION
5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Welding 3A.
A continuation of Welding 3A in the design, construction, and finishing of welded projects. (A, CSU)
3C CUSTOM METAL FABRICATION
2.5 units, 8 lab hours
PREREQUISITE: Welding 3B.
This course is a continuation of Weld 3B and allows students to use the skills learned in the previous class to fabricate custom projects. (A, CSU)

4A HEAVY PLATE, STRUCTURAL STEEL AND WELDING CERTIFICATION
5 units, 3 lecture hours, 7 lab hours
ADVISORY: Welding Technology 4A. ADVISOR: Drafting 12 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.
An emphasis on obtaining certification in vertical and overhead welding positions (3G and 4G) in structural welding with shielded metal arc welding (SMAW), flux cored arc welding (FCAW), gas metal arc welding (GMAW) processes leading to the American Welding Society (AWS) Structural Welding Code Certification test. (A, CSU)

4B PIPE, TUBE WELDING AND CERTIFICATION
5 units, 3 lecture hours, 7 lab hours
PREREQUISITE: Welding Technology 4A. ADVISORY: Drafting 12 and eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.
Shielded metal arc, gas metal arc welding, gas tungsten arc, and flux cored arc welding processes on different piping systems. Fit up and assemble joint configurations used in pressure vessel, power systems, cross country and refinery applications. Certification procedures in accordance with API, AWS, and ASME codes. (A, CSU)

56 BLUEPRINT READING FOR WELDERS
2 units, 2 lecture hours
ADVISORY: Eligibility for English 1A and Mathematics 201 or Applied Technology 130 recommended.
Basic fundamentals of blueprint reading and welding symbol interpretation as required by the welding trade. (A, CSU)

WOMEN’S STUDIES (WSTS)

5 SOCIOLOGY OF RAPE
3 units, 3 lecture hours, (See also Sociology 5)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro overview of rape including the history of rape, a study of what creates a rape culture, social and psychological characteristics and pathology of rapists, sociological impact upon and psychology of the survivor. Includes examination of various forms of sexual assault such as acquaintance rape, marital rape, male rape, gang rape and child sexual assault. The sociological foundation and history of current laws and their execution are also explored. (A, CSU, UC)

7 DOMESTIC VIOLENCE: ABUSE WITHIN THE FAMILY
3 units, 3 lecture hours, (See also Sociology 7)
ADVISORY: Eligibility for English 1A recommended.
A micro and macro study of the historical and contemporary problem of domestic violence. Overview of the battered spouse syndrome, characteristics of the survivor and the batterer, therapeutic approaches, and development of legislation. Various forms of domestic violence such as child abuse, elder abuse, and violence in same gender relationships are also studied. (A, CSU, UC)

10 CHANGING ROLES OF WOMEN
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The traditional and changing roles of women in Western society, including the effects of these roles on women as individuals, in their personal relationships, and their status in society. The contributions and contrasting perspectives of minority/ethnic women are an integral part of the course content. (C-ID SJS 120) (A, CSU-GE, UC, I)

22 HISTORY OF AMERICAN WOMEN
3 units, 3 lecture hours, (See also History 22)
ADVISORY: English 1A.
Women in American history: social, political, and economic actions and reactions of American women; racial, ethnic, religious, geographic, and class differences. (A, CSU-GE, UC, I)

24 LA CHICANA AND LATINA
3 units, 3 lecture hours, (See also Chicano-Latino Studies 24)
ADVISORY: Eligibility for English 1A recommended.
A sociological analysis of Mexican American women in contemporary society. Special emphasis placed on her role in the family, church, education, economics, and politics. (A, CSU, UC)

25 ASSERTIVENESS TRAINING
2 units, 2 lecture hours, (See also Human Services 25)
ADVISORY: Eligibility for English 1A recommended.
Becoming more effective and creative in expressing oneself in a courteous and dignified manner. Discovering the communication options available in various life situations. (A, CSU)
30 ASIAN-AMERICAN WOMEN
3 units, 3 lecture hours, (See also Asian-American Studies 30)
ADVISORY: Eligibility for English 1A recommended.
This course examines the historical, social, and cultural experiences of Asian American women from the late 1800s to the present. Topics include: immigration and settlement; labor participation; dating and marriage; family and career choices; inter-generational relations; participation in labor market; media portrayals; violence against women; globalization and work; and movements for social change. (A, CSU-GE, UC, I)

36 WOMEN’S LITERATURE
3 units, 3 lecture hours, (See also English 36)
PREREQUISITE: English 1A or equivalent.
Survey of literature by women in fiction, drama, poetry, biography, and essay. Covers multicultural and international literature from classical to contemporary periods, in addition to feminist and gender theory. (A, CSU-GE, UC, I)

41 AFRICAN-AMERICAN WOMEN’S STUDIES
3 units, 3 lecture hours, (See also African-American Studies 41)
ADVISORY: Eligibility for English 1A recommended.
Analyzes the social, political, and cultural history of African American women in the United States from an interdisciplinary perspective including the complex ways that ethnicity, class and gender have shaped African American women’s lives and the strategies they have used to empower themselves and their communities. (A, CSU-GE, UC, I)

43 WOMEN’S NUTRITION
2 units, 2 lecture hours, (See also Food and Nutrition 43)
ADVISORY: Eligibility for English 1A recommended.
The relationship between nutrition and various contemporary health issues affecting women. Significance of nutrition as it relates to the health of women during specific stages in the life cycle. Current trends and research. (A, CSU)

44 WOMEN IN MANAGEMENT
3 units, 3 lecture hours, (See also Business Administration 44)
ADVISORY: Business Administration 10 and eligibility for English 1A recommended.
Management and entrepreneurial behaviors for women seeking leadership skills, particularly for managers and those aspiring to executive levels. (A, CSU)

47 INTRODUCTION TO LESBIAN AND GAY STUDIES
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
The interdisciplinary field of Lesbian and Gay Studies through the disciplines of history, literature, law, science, political science, media, psychology, and education. Issues to be covered will include but not be limited to identity development and coming out, cultural ideology, sub-cultures, activism, gay marriage, gay parenting and community. Theoretical perspectives concerning the historical development of sexual identity, the marginalization of sexual minority communities within social institutions and concomitant issues of class, race and gender in contemporary U.S. society and around the world will be explored. (A, CSU-GE, UC, I)

WORK EXPERIENCE, GENERAL (WKEXP)

19 WORK EXPERIENCE (COOPERATIVE), GENERAL
1-6 units
COREQUISITE: Fall and Spring Semesters: Must be enrolled in at least one other course, in addition to work experience. Summer Session: Enrollment in another college course is optional. Work experience need not be related to student's educational goal.
Acquisition of desirable work habits, attitudes and career awareness. Exploring basic academic skills, communicating, adapting to new situations, and problem solving. Seventy-five (75) hours of paid work or 60 hours of non-paid work per unit per semester. Maximum of six (6) units total in one enrollment period and not repeatable. (A, CSU)

ZOOLOGY
SEE BIOLOGY
COLLEGE PERSONNEL

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Board of Trustees
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Magdalena Gomez
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John Leal
Eric Payne
Annalisa Perea

Administration
Dr. Paul Parnell
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Jerome Countee
Vice Chancellor, Educational Services and Institutional Effectiveness
Cheryl Sullivan
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Christine Miktarian
Vice Chancellor, Operations and Information Services
Julianna Mosier
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Administration
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Vice President of Administrative Services
Dr. Lataria Hall
Vice President of Student Services
Don Lopez
Vice President of Instruction
Robert Pimentel
Vice President of Educational Services and Institutional Effectiveness

Instructional Deans
Dr. Becky Barabe
Dean of Instruction, Applied Technology, Career and Technology Center and Workforce Development Divisions
Donna G. Cooper
Dean of Instruction, Student Success and Learning Division
Shirley McManus
Dean of Instruction, Math, Science and Engineering Division
Dr. Margaret E. Mericle
Dean of Instruction, Social Sciences Division

Gurminder Sangha
Dean of Instruction, Educational Services and Pathway Effectiveness
Lorraine Smith
Dean of Instruction, Allied Health, Physical Education, and Athletics Division
Neil Vanderpool
Dean of Instruction, Fine, Performing, and Communication Arts Division
Tabitha Villalba
Dean of Instruction, Academic Services and Humanities Pathways Division
Dr. Timothy J. Woods
Dean of Instruction, Business Division

Student Services Deans
Monica Cuevas
Dean of Student Services, Counseling and Guidance
Sean Henderson
Dean of Student Services, EOPS
Faculty and Administration

Adams, Darren (2013) 
**Electrical Systems Technology**

Adams, Elizabeth (2017) 
**Engineering**  
B.S., Boise State University  
M.S., University of Hawaii  
Ph.D., Arizona State University

Allen, Nathan (2011)  
**Mathematics**  
A.A., Reedley College  
B.A., M.A., California State University, Fresno

Al-kuhlani, Mufadhal (2018)  
**Biology**  
B.S., University of Kansas  
Ph.D., University of California, Merced

**Counselor, Disabled Students Programs & Services**  
B.A., M.S., California State University, Fresno

Anderson, Lydia (1997)  
**Business Administration, Marketing**  
A.A., Reedley College  
B.S., M.B.A., California State University, Fresno

Anderson, Sasha (2008)  
**Mathematics**  
B.A., University of California, Santa Barbara  
M.A., California State University, Fresno

Antonio, Estefana (2013)  
**Child Development Coordinator**  
B.S., M.A., California State University, Fresno

**Mathematics**  
B.A., California State University, Fresno  
M.A., Fresno Pacific University

Baca, Marisol (2014)  
**English**  
A.A., San Antonio College  
B.A., California State University, Fresno  
M.F.A., Cornell University

Baker, Brian (2012)  
**Computer Information Technology**  
B.A., M.S., California State University, Fresno

Balakian, Amber (2015)  
**Entrepreneurship/Business Administration**  
B.A., University of California, San Diego  
M.A., Harvard University

Baldwin, William (2017)  
**Nursing**  
A.S., Fresno City College  
B.S., M.S.N., Grand Canyon University

Balogh, David (2001)  
**Physics**  
B.S., M.S., Brigham Young University

Bane, Leigh Ann (2016)  
**Reading**  
B.S., Oklahoma State University  
M.A., California State University, Fresno

Barabe, Becky (2017)  
**Dean of Instruction, Applied Technology, Career and Technology Center and Workforce Development Divisions**  
B.A., University of California, Berkeley  
M.A., Fresno Pacific University  
Ed.D., Concordia University, Portland

Bascom, Brandon (2014)  
**Music**  
B.M., Brigham Young University  
M.M., Manhattan School of Music  
M.M., University of Michigan  
D.M.A., University of Iowa

Bedolla, Delmy J. (2019)  
**Respiratory Care**  
A.A., Reedley College  
A.S., Fresno City College  
B.A., University of California, Riverside  
M.A., Fresno Pacific University

Begley, Polly (2000)  
**Communication**  
B.A., M.A., San Diego State

Benas, Rebecca (2015)  
**English**  
B.A., University of Washington  
M.A., California State University, Bakersfield

**Nursing**  
B.S., Point Loma College, San Diego  
M.S., California State University, Domínguez Hills  
Ed.D., California State University, Fresno

Bezerra-Nader, Rosemarie (1990)  
**Developmental Mathematics**  
B.A., California State University, Fresno  
M.A., Fresno Pacific College

Bibayoff, Natalie (2017)  
**Human Services**  
A.A., Fresno City College  
B.A., California State University, Long Beach  
M.S.W., University of California, Los Angeles  
Ed.D., California State University, Sacramento

Blackerby-Slater, Laurel (2001)  
**Mathematics**  
B.S., University of California, Davis  
M.A., Fresno Pacific University

Blodgett, Ryan (2008)  
**Counselor, Disabled Students Programs & Services**  
B.A., M.A., California State University, Fresno

Bluth, Gary (1991)  
**Physical Education**  
B.A., M.A., San Francisco State

Bolen, Gennean (2001)  
**English**  
B.A., M.A., California State University, Fresno  
Ed.D., Alliant International University

Boyd, Sean (2018)  
**Geography**  
B.A., California State University, Fresno

Boyle, Anna (2014)  
**English**  
B.A., M.A., California State University, Fresno

Brady, Christopher P. (2018)  
**Commercial Music**  
A.A., Los Medanos College  
B.A., Brigham Young University  
M.A., University of California, Los Angeles

Brandl, Jeremy (2011)  
**Mathematics**  
B.A., M.A., California State University, Fresno
Brito, Simone (2016)  
Biology  
B.S., M.S., Universidade Estadual Paulista

Brotsis, William (2007)  
Fire Technology  
A.A., Fresno City College  
B.A., Fresno Pacific College

Cacossa, Peter (2018)  
Fire Academy Coordinator  
B.S., United States Military Academy of West Point

Caetano, Heidi (2008)  
Dental Hygiene  
A.S., Fresno City College  
B.S., California Polytechnic University, San Luis Obispo  
M.A.Ed., Fresno Pacific University

Caeton, Daniel (2016)  
English  
B.A., University of California, Berkeley  
M.A., California State University, Fresno

Callahan, Kevin (2015)  
Police Academy Coordinator  
B.S., California State University, Sacramento  
Master of Advance Study, University of California, Irvine

Camacho, Brett P. (2005)  
Welding Technology  
B.S., M.S., California Polytechnic University, San Luis Obispo

Camacho, Tammy (2011)  
Applied Technology  
B.S., M.S., California Polytechnic, San Luis Obispo

Campos, David (2017)  
English  
B.A., California State University, Fresno  
M.F.A., University of California, Riverside

Cantu, Gerald C. (2019)  
Philosophy  
A.A., Bakersfield College  
B.A., University of California, Berkeley  
Ph.D., University of California, Irvine

Carrigan, Janel (2012)  
Business Administration  
B.A., Pepperdine University  
M.B.A., National University

Carroll, Jean (2001)  
English for Multi-Lingual Students  
B.A., California State University, Fresno  
M.A., University of South Florida

Caviglia, Tony (1999)  
Physical Education  
A.A., Chabot College  
B.A., California Polytechnic, San Luis Obispo  
M.A., University of Southern California

Cazares, Ernesto (2018)  
Counselor  
A.S., Fresno City College  
B.S., California State University, Fresno

Developmental English  
B.A., University of California, Davis  
M.F.A., California State University, Fresno

Cherry, Rebecca (2019)  
Chemistry  
B.S., M.S., University of Colorado, Denver

Cho, John (2001)  
Asian-American Studies  
B.A., M.A., California State University, Fresno

Christi-Stein, Janine (2007)  
Theatre Arts Director  
B.A., University of California, Santa Cruz  
M.F.A., California State University, Fullerton

Clift, Renee (2016)  
Human Services  
B.A., M.S.W., California State University, Fresno

Cole, Michael (2009)  
Philosophy  
B.A., University of California, Los Angeles  
Ph.D., University of California, Santa Barbara

Cooper, Donna G. (2018)  
Dean of Instruction, Student Success & Learning  
B.S., Judson College  
M.A., Ed.D., California State University, Fresno

Cooper, Kevin (2009)  
Music  
B.M., Ithaca College  
M.M., D.M.A., University of Southern California

Coronel, Maria (2007)  
Spanish  
A.A., Imperial Valley College  
B.A., M.A., California State University, San Diego

Corsepius, Nicholas C. (2019)  
Chemistry  
B.S., Ph.D., University of Maryland College Park

Cox, Melody (2016)  
Nursing  
A.A., El Camino Community College  
B.S.N., California State University, Long Beach  
M.S.N., Gonzaga University

Crawford, Kathleen (1999)  
History  
B.A., California State University, Fresno  
M.A., University of California, Los Angeles

Crocket, Karen (1998)  
English  
B.A., M.A., California State University, Fresno

Crooks, Elizabeth, (2015)  
Medical Assisting  
B.A., State University of New York at Plattsburgh  
M.A., Alliant University

Cuevas, Monica (2014)  
Dean of Students, Counseling and Guidance  
B.A., California State University, Fresno  
M.S., National University
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<th>Name</th>
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<td>Culver-Dockins, Natalie (2008)</td>
<td><strong>Director of Counseling and Special Projects</strong></td>
<td>B.S., California State University, Stanislaus A.A., San Jose State University Ed.D., California State University, Fresno</td>
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<td>Curtis, Carol (1994)</td>
<td><strong>Mathematics</strong></td>
<td>B.A., M.A., Ed.D., California State University, Fresno</td>
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<td>Dancy, Karen (2008)</td>
<td><strong>Business &amp; Technology</strong></td>
<td>B.S., California Polytechnic University, Pomona M.B.A., DeVry University</td>
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<td><strong>Culinary Arts</strong></td>
<td>A.O.S., Le Cordon Bleu B.S., Brigham Young University</td>
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<td>Davis, Theophilus (2005)</td>
<td><strong>Welding Technology</strong></td>
<td>A.S., Austin Community College</td>
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<td>Day, Diana (2009)</td>
<td><strong>Respiratory Care</strong></td>
<td>A.S., Tulsa Junior College B.S., M.B.A., University of Phoenix</td>
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<td>DeAnda, Carolyn (2010)</td>
<td><strong>Photography</strong></td>
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<td><strong>Photography</strong></td>
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<td>DeFreitas, Diane (2008)</td>
<td><strong>Economics</strong></td>
<td>A.A., American River B.S., M.A., California State University, Hayward</td>
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<td>DeKlotz, Olena (2013)</td>
<td><strong>English</strong></td>
<td>B.A., Pedagogical College, Kyiv, Ukraine M.A., University of Ukraine M.A., California State University, Fresno</td>
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<td><strong>Women's Studies, Psychology</strong></td>
<td>B.A., M.A., California State University, Fresno</td>
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<td>Denis-Arue, Nuria M. (2005)</td>
<td><strong>Biology/Microbiology</strong></td>
<td>B.A., M.A., California State University, Fresno</td>
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<td>DeSantiago-Gomez, Laura (1999)</td>
<td><strong>Counselor</strong></td>
<td>B.A., M.A., California State University, Fresno</td>
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<td>DeVoe-Peterson, Robert (2001)</td>
<td><strong>Computer Information Technology</strong></td>
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<td>Dorn, Lawrence S. (1989)</td>
<td><strong>Mathematics, Developmental Math</strong></td>
<td>B.A., California State University, Fresno M.B.A., California State University, Fresno</td>
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<td>Doud, Laurel M. (2005)</td>
<td><strong>Librarian</strong></td>
<td>B.A., Stanford University M.L.S., San Jose State University</td>
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<td><strong>Biology</strong></td>
<td>B.A., Pepperdine University M.S., California State University, Fullerton</td>
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<td><strong>Art, Sculpture</strong></td>
<td>B.F.A., San Francisco Art Institute M.F.A., School of the Art Institute of Chicago</td>
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<td><strong>Business Administration/ Marketing</strong></td>
<td>B.S., M.B.A., Creighton University Ph.D., University of Kansas</td>
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<td><strong>Accounting</strong></td>
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<td>Edwards, Sarah (1998)</td>
<td><strong>Health Information Technology</strong></td>
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<td><strong>Industrial Mechanic</strong></td>
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<td><strong>Theatre Arts</strong></td>
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<td><strong>Theatre Arts</strong></td>
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<td>Ferrer, Sharon (1995)</td>
<td><strong>Spanish</strong></td>
<td>B.A., M.A., California State University, Fresno</td>
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<td><strong>Director, Police Academy</strong></td>
<td>B.S., M.A., California Coast University</td>
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<td>Fisher, Jessica (2015)</td>
<td><strong>Adaptive English</strong></td>
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<td>Fletcher, Alex (2018)</td>
<td><strong>Physical Education</strong></td>
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<td>Fletcher, Eric (1999)</td>
<td><strong>Communication, Forensics</strong></td>
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<td>Florence, Christine A.</td>
<td>Nursing</td>
<td>A.D.N., DeAnza College, B.S.N., M.S.N./Ed., University of Phoenix</td>
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<td>Ford, Kierst R.</td>
<td>Geology</td>
<td>B.S., M.S., California State University, Fresno</td>
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<td>Forestiere, Marc C</td>
<td>Computer Information Technology</td>
<td>B.S., California State University, Sacramento, M.A., Fresno Pacific College</td>
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<td>Garcia-Lupian, Sonia</td>
<td>Counseling</td>
<td>B.A., M.S.W., California State University, Fresno</td>
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<td>Gaxiola, Thomas J.</td>
<td>Director of EOPS/CARE</td>
<td>B.S., M.A., California State University, Fresno</td>
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<td>Germond, Oliver</td>
<td>Physical Education</td>
<td>B.S., California State University, Northridge, M.S., National University</td>
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<td>Gilbert, Michael</td>
<td>Biology</td>
<td>B.S.C., University of Central England, Ph.D., Leeds, School of Physiotherapy, UK</td>
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<td>Gilmore, Paul C.</td>
<td>History</td>
<td>B.A., Furman University, M.A., University of Wisconsin, M.S., Georgia Institute of Technology</td>
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<td>Goishi-Bessey, Lilli</td>
<td>Student Health Services Coordinator</td>
<td>B.S., D.N.P., California State University, Fresno, M.S., Fresno Pacific University</td>
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<td>Goldsmith, Carole</td>
<td>President</td>
<td>B.A., California State University, Fresno, M.A., National University, Ed.D., California State University, Fresno and University of California, Davis</td>
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<td>Gonzales, Janine</td>
<td>Counseling</td>
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<td>Gonzalez, Eileen</td>
<td>Nursing</td>
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<td>Goodson, Cheryl</td>
<td>Education</td>
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<td>Gose, Kristine</td>
<td>Child Development</td>
<td>B.A., M.A., California State University, Fresno</td>
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<td>Green, JoEllen</td>
<td>Decision Science</td>
<td>B.S., M.S., University of California, Riverside, M.S., Capella University</td>
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<td>Gruet, Karin</td>
<td>Chemistry</td>
<td>Licence, Mâitruse, DEA Chemistry, Univasile Paul Sabatier, France, M.S., Ph.D., Yale University</td>
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<td>Guffy, L. Zay</td>
<td>Developmental English</td>
<td>A.A., Fresno City College, B.A., M.F.A., California State University, Fresno</td>
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<td>Gutierrez-Osborne</td>
<td>Biology</td>
<td>B.A., M.A., California State University, Los Angeles, M.A., California State University, Fresno</td>
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<td>Gutierrez-Sauceda, Nancy M.</td>
<td>Sociology</td>
<td>B.A., California State University, Fresno, M.A., University of Wisconsin</td>
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<td>Guzman, Juan</td>
<td>English</td>
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<td>Hall, Lataria</td>
<td>Vice President of Student Services</td>
<td>A.A., College of the Sequoias, B.S., M.S., California State University, Fresno, Ed.D., Northcentral University, Prescott</td>
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<td>Hao, Jian-Min</td>
<td>Dance</td>
<td>B.F.A., Central Beijing Dance Academy, M.F.A., University of California, Los Angeles</td>
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<td>He, Jiandong (Jin)</td>
<td>Mathematics</td>
<td>B.S., Jilin University, Peoples Republic of China, M.S., California State University, Fresno</td>
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<td>Henderson, Caleb</td>
<td>Art</td>
<td>B.F.A., Utah Valley University, M.F.A., Tulane University</td>
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<td>Henderson, Sean</td>
<td>Dean of Student Services, EOPS</td>
<td>B.A., M.A., California State University, Fresno</td>
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<td>Henkle, Charles</td>
<td>Coordinator, Police Academy</td>
<td>B.S., California State University, Fresno</td>
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<td>Hentsler, Jerry</td>
<td>Adaptive Ornamental Horticulture</td>
<td>B.S., Kansas State University</td>
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<td>Hernandez, Maria</td>
<td>Automotive Technology</td>
<td>A.S., Fresno City College</td>
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<td>Political Science</td>
<td>B.A., San Francisco State University, M.A., California State University, Fresno</td>
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<td>Art</td>
<td>A.A., Mesa Community College, B.S., University of Oregon, M.F.A., Arizona State University</td>
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<td>Mathematics</td>
<td>B.S., M.S., California Polytechnic, San Luis Obispo</td>
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Herrick, Lee (1997)
  Developmental English
  B.A., M.A., California State University, Stanislaus

Hester-Haynes, Juanita (2016)
  Mathematics
  A.S., Chabot College
  B.A., M.A., California State University, Fresno

Heyne, Bridget (2001)
  Nursing
  A.A., Reedley College
  B.S., University of California, Los Angeles
  A.D.N., Forest Park Community College
  M.S.N., California State University, Fresno
  Ed.D., California State University, Fresno

Hiebert, Margaret P. (2005)
  Developmental English
  A.A., Reedley College
  B.A., M.A., California State University, Fresno
  Ph.D., State University of New York

Hill, Bruce (2007)
  Criminology
  B.A., Occidental College
  J.D., University of California, Los Angeles

Hodges, Cynthia (1990)
  American Sign Language
  B.S., Gallaudet College
  M.S., University of Arizona

Holland, Nancy (2001)
  Business Administration/
  Marketing
  A.S., College of the Sequoias
  B.A., California State University, Fresno
  M.S., Chapman University

Hood, Brett (2006)
  Nursing
  B.S., California State University, Fresno
  M.B.A., National University

Howard, Jeanice (2013)
  Dental Hygiene
  A.S., Fresno City College
  B.A., M.A., Fresno Pacific University

Hsiao, John (2018)
  English
  B.A., M.A., California State University, Long Beach

Hubbard, Greg (2006)
  Photography
  A.A., Butte Community College
  B.A., California State University, Sacramento
  M.A., California State University, Fresno

Huneault-Schultze, Sylvie (2001)
  English for Multi-Lingual Students
  A.A., Cape Cod Community College
  B.A., University of Massachusetts, Boston
  M.A., Monterey Institute of International Studies

Hwang, Won Hoi (2019)
  Geology/GIS
  B.S., Konkuk University
  M.S., Marshall University
  Ph.D., Virginia Polytechnic Institute and State University

Jamison, Gregory (1997)
  Mathematics
  B.A., M.A., California State University, Fresno

Jauregui, Enrique (2000)
  SLO/Assessment Coordinator
  B.A., M.A., California State University, Fresno

Jeffcoach, Daniel (2017)
  Biology
  B.S., Cal Poly, San Luis Obispo
  M.S., California State University, Fresno

Johnson, Frederick (2008)
  Police Academy Instructor/Coordinator
  A.S., Fresno City College
  B.S., National University

Johnson, Gerard (2015)
  Counselor
  B.A., California State University, Fresno
  M.A., San Jose State University

Johnson, Mikki
  Director of Financial Aid
  M.B.A., California State University, Fresno

Jones, Tiffany (1997)
  Mathematics
  B.A., M.A., California State University, Fresno

Joseph, James (1999)
  Political Science
  B.A., M.A., California State University, Fresno
  Ph.D., University of California, Riverside

Kamimoto, Martin S. (1996)
  Automotive Technology
  A.S., Fresno City College
  B.S., M.S., California State University, Fresno

Kawagoe, Jodi (2015)
  Chemistry
  B.S., Iowa State University
  M.A., University of North Carolina at Chapel Hill

Kelley, Monique (2001)
  Accounting
  B.A., Morris Brown College
  M.P.A., Georgia State University

Kerfoot, Mark (2015)
  Physics
  B.S., California State University, Sacramento
  B.A., University of California, Davis
  Ph.D., University of California, Merced

Keysaw, Paul (2006)
  Physical Education
  B.A., M.A., California State University, Bakersfield

Khal, Christopher (2019)
  Kinesiology, Health and Sports Medicine
  B.S., California State University, Fresno
  M.A., Fresno Pacific University

Khan, Kherstin (2011)
  Communication
  B.A., M.S., California State University, Fresno

Kirby, James (2008)
  Human Services
  A.A., Ventura College
  B.A., M.S.W., California State University, Fresno

Kirk, Karla (2011)
  African-American Studies
  B.A., M.A., Fresno Pacific University

Kobashigawa, Linda (2015)
  Librarian
  B.A., California State University, Fresno
  M.L.S., University of California, Los Angeles
Lane, Russel K. (2019)
Electrical Systems Technology
A.A., Fresno City College
B.S., University of Phoenix
M.B.A., California State University, Fresno

Leach, Rachel L. (2019)
Biology
B.S., M.S., California State University, Fresno

Lee, Bryan (2015)
Air Conditioning
B.S., Western Governors University

Lewallen, Jennifer (2017)
Communication Arts
B.A., University of California, Santa Barbara
M.A., Pepperdine University
Ph.D., University of Missouri

Lewallen, Robert (2017)
Air Conditioning
A.A., A.S., Fresno City College
B.S., California State University, Fresno

Lewis, Deborah (2007)
Child Development
A.A., Fresno City College
B.A., National University
M.A., California State University, Fresno

Linder, Colby (2001)
Biology
B.A., M.A., California State University, Fresno

Loftis, Darlene (1991)
High Tech Center
B.A., California State University, Fresno
M.A., Fresno Pacific College

Lopez, Donald F. (1995)
Vice President of Instruction
B.S., M.B.A., California State University, Fresno

Lozano, Alicia (2008)
Nursing
L.V.N., Clovis Adult School
A.D.N., Fresno City College
B.S.N., M.S.N., California State University, Fresno

Lucckesi, Paul (2018)
Music
B.A., California State University, Fresno
M.A., Sam Houston State University

Luna, Cynthia (2001)
Communication
A.A., Moorpark College
B.A., M.A., California State University, Fresno

MacLeod, Susan (2019)
Biology
A.A.S., Lichtenberg-Oberstufengymnasium
B.S., Freie Universitat Berlin
M.A., City College of New York

Physical Education
B.A., Sonoma State University
M.A., California State University, Chico

Magnia, Martha (2008)
Child Development
B.S., M.A., California State University, Fresno

Mannon, Kayla (2014)
Counselor
B.A., California State University, Fresno
M.S., National University

Martinez, Brandi (2019)
Nursing
B.A., B.S., M.S., California State University, Fresno

Martinez, Ernie
Director of Student Activities
Ph.D., Alliant University

Martinez, Robert II (2000)
Electrical Systems Technology
B.S., California State University, Fresno

McCollough, Mark D. (1999)
Computer Aided Design/Computer Aided Manufacturing CAD/CAM
A.A., Hartnell College
B.A., California State University, Long Beach

McDonald, Travis (2015)
Mathematics
B.A., M.A., California State University, Fresno

McLeod, Todd (2001)
Computer Information Technology
B.A., University of California, Santa Cruz
M.B.A, California State University, Fresno

McManus, Shirley (1992)
Dean of Instruction, Mathematics, Science and Engineering Division
B.S., M.A., California State University, Fresno

McMichael, John (2016)
Humanities
B.A., The Master's College
M.A.T., Fuller Theological Seminary M.Div., Golden Gate Baptist Theological Seminary
M.A., Ph.D., University at Albany, SUNY

Melton, Christopher (2019)
Chemistry
B.A., B.S., Francis Marion University
Ph.D., University of California, Davis

Mendoza, Matthew (2019)
Respiratory Care
A.S., San Joaquin Valley College
A.S., Reedley College
B.S., California State University, Fresno
M.S., Northeastern University

Mericle, Margaret E. (1999)
Dean of Instruction, Social Sciences Division
A.B., Ohio University
M.A., Ph.D., State University of New York at Stony Brook

Miller, Bruce A. (1996)
Electrical Systems Technology
A.A.S., Ferris State College, Michigan
B.S., California State University, Fresno

Miller, Mary Beth (2001)
Child Development
B.S., M.A., California State University, Fresno
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<tr>
<th>Name</th>
<th>Department</th>
<th>Education</th>
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<td>Mimura, Stacie</td>
<td>Communication Arts</td>
<td>B.A., M.A., California State University, Fresno</td>
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<tr>
<td>Minar, Cynthia “Jill”</td>
<td>Anthropology/Archaeology</td>
<td>B.A., California State University, Long Beach, M.A., Ph.D., University of California, Riverside</td>
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<td>Mitchell-Carroll, Nancy</td>
<td>American Sign Language</td>
<td>A.S., Northwestern Connecticut Community College, B.S., University of Utah, M.S., California School of Professional Psychology</td>
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<td>Mizner, Keith</td>
<td>Accounting</td>
<td>A.A., College of the Sequoias, B.S., M.S., California State University, Fresno</td>
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<td>Mohle, Dennis I.</td>
<td>Computer Information Technology</td>
<td>Air Force Academy, M.S., West Coast University</td>
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<td>Moses, John</td>
<td>English</td>
<td>A.B., Albright College, M.A., Kutztown State College, Ph.D., Miami University</td>
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<td>Mossette, Mary Beth</td>
<td>Director CalWORKs</td>
<td>B.S., Southeast Missouri State University, M.A., California State University, Fresno</td>
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<td>Munoz, Shana</td>
<td>English</td>
<td>A.A., Santa Rosa Jr. College, B.A., M.A., California State University, Fresno</td>
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<td>Mushibe, Eliud</td>
<td>Chemistry</td>
<td>B.S., University of Nairobi, M.S., University of Botswana, Ph.D., Binghamton University</td>
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<td>Natal, Lori</td>
<td>Counselor</td>
<td>A.A., Fresno City College, B.A., M.S., California State University, Fresno</td>
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<td>Navarro, Bernard M.</td>
<td>Sociology</td>
<td>B.A., Fresno City College, B.A., California State University, Fresno, M.A., Ph.D., University of Oregon</td>
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<td>Nelson, Gretchen</td>
<td>Nursing</td>
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<td>Nelson, Rebecca</td>
<td>Business &amp; Technology</td>
<td>A.A., Reedley College, B.A., Fresno Pacific University, M.B.A., National University</td>
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<td>English</td>
<td>B.A., M.Ed., Texas Christian University, M.F.A., California State University, Fresno</td>
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<td>Radiologic Technology</td>
<td>A.S., Fresno City College, B.S., California State University, Fresno, M.S., National University</td>
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<td>Child Development</td>
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<td>Linguistics/English for Multi-Lingual Students</td>
<td>B.A., M.A., California State University, Fresno</td>
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<td>Olsen, Rodney G.</td>
<td>Biology</td>
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<td>Criminology</td>
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<td>Computer Information Technology</td>
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<td>Dental Hygiene</td>
<td>A.S., Fresno City College, B.A., Fresno Pacific University, M.A., Alliant International University</td>
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<td>Palmer, Richard</td>
<td>Biology</td>
<td>B.S., Oregon State University, M.S., California State University, Fresno</td>
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<td>Pankratz, Aaron</td>
<td>Economics</td>
<td>B.A., M.P.P., Pepperdine University</td>
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<td>Papavasiliou, Nilli</td>
<td>Engineering</td>
<td>B.S., University of California, Los Angeles, M.S., California State University, Fresno</td>
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<td>Parish, Max G.</td>
<td>Philosophy</td>
<td>A.S., Reedley College, B.A., University of Illinois, Springfield, M.A., Ph.D., University of Oklahoma</td>
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<td>Parker, Joshua</td>
<td>Communication</td>
<td>B.A., Fresno Pacific University, M.A., California State University, Fresno, Ed.D., California State University, Fresno and University of California, Davis</td>
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<td>Patton, Michelle</td>
<td>English</td>
<td>A.A., Fresno City College, B.A., M.F.A., California State University, Fresno</td>
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<td>Pimentel, Robert</td>
<td>Vice President of Educational Services and Institutional Effectiveness</td>
<td>A.A., West Hills College, B.A., Ed.D., California State University, Fresno, M.A., California State University, Bakersfield</td>
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<td>Pinkard, Joyce</td>
<td>Spanish</td>
<td>B.A., M.A., Mississippi State University</td>
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<td>Polanowski, Craig P.</td>
<td>Graphic Communications</td>
<td>A.A.S., Brookdale Community College, N.J., B.S., Trenton State College, New Jersey, M.Ed., University of Massachusetts</td>
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Porteous, Scott (2001)

Biology
B.A., M.A., California State University, Fresno

Potter, Sally (2013)

English for Multi-Lingual Students
B.A., M.A., California State University, Fresno

Prandini, Kellen (2016)

Anthropology
B.A., Loyola Marymount University
M.A., San Francisco State University

Preston-Smith, Julie (2002)

Counselor
B.A., University of California, Irvine
M.S., California State University, Long Beach

Priewisch, Alexandra (2017)

Geology
B.S., M.S., University of Mainz, Germany
Ph.D., University of New Mexico

Putman, Dale (2018)

Maintenance Mechanic
A.A., Fresno City College
B.S., California State University, Fresno

Quintana, Monique (2019)

English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno

Radnejad, Forouzandeh (2005)

Counselor
B.A., Esfahan University, Iran
M.S., California State University, Fresno

Ragsdale, Michael (2017)

Physical/Natural Science
B.S., M.S., California State University, Fresno

Ramirez, Graciela (1996)

Counselor
B.A., M.A., California State University, Fresno

Ramos, Loretta (1994)

Communication
B.A., University of Southern California
M.A., California State University, Fresno
J.D., San Joaquin College of Law

Razee, Alan (2008)

Communication
B.A., California Polytechnic University, San Luis Obispo
M.A., Ph.D., University of Washington

Reitz-Robinson, Stephanie (2008)

Director of Nursing
A.S., Fresno City College
B.S., California State University, Dominguez Hills
M.H.A., Chapman University
Ph.D., University of Phoenix

Reyes, Jesus (2011)

Physical Education
A.A., Mt. San Antonio College
B.A., San Diego State University
M.A., St. Mary's College

Reynoso, Bernardo (2018)

Director of TriO Programs
B.A., California State University, Fresno

Riley, David (2001)

Electrical Systems Technology
B.S., M.S., California State University, Fresno

Risch, Krystin (2017)

Communication Arts
B.A., M.A., California State University, Fresno

Rivera, Ricardo (2016)

Art
B.F.A., M.F.A., San Francisco Art Institute

Roblee, Kieran (2016)

Physical Education
A.A., Santa Barbara City College,
Fresno City College
B.A., California State University,
M.A., Fresno Pacific University

Rosendahl, Douglas (2017)

Auto Collision Repair Technology

Rubalcaba, Jacquelyn (2015)

Director for Deaf and Hard of Hearing and other Disabilities
B.A., M.S., California State University, Fresno

Rutishauser, Brian (1999)

History
B.A., University of Dayton
M.A., Ph.D., Ohio State University

Ryan, James (1991)

Mathematics
A.A., Chabot College
B.S., M.S., California Polytechnic State University, San Luis Obispo

Ryska, Kelsey S. (2019)

Mathematics
B.A., Fresno Pacific University
M.S., California Polytechnic State University, San Luis Obispo

Saiz, Sallie (2014)

English
B.A., Fresno City College
B.A., M.A., M.F.A., California State University, Fresno

Samra, Sandi (2004)

Counselor
B.A., California State University, Fresno
M.S., National University

Sanders, Eric (2016)

Tutorial Center Coordinator
B.A., Duke University Master of Exercise and Sports Sciences, University of Florida, Gainesville M.S., Capella University

Sandhu, Sukhchain (2017)

Nursing
B.S., M.E., Punjabi University, Patiala
B.E., M.A., Panjab University, Chandigarh
M.S., California State University, Fresno

Sangha, Gurmindar (2019)

Dean of Instruction, Educational Services and Pathway Effectiveness
A.S., Fresno City College
B.S., M.B.A., California State University, Fresno

Santos, Geraldine (1999)

Counselor
B.A., M.A., California State University, Fresno

Santos, Jeannie (2009)

English
B.A., M.A., California State University, Fresno

Sause, James (2000)

Computer Information Technology
B.S., California State University, Fresno
M.B.A., National University
Scheidt, Richard (1997)  
Physical Education  
B.S., San Francisco State University  
M.A., California State University, Fresno  

Schmalle, Robert C. (2005)  
Business Administration/  
Business Law  
A.A., Fresno City College  
B.A., Fresno Pacific University  
J.D., San Joaquin College of Law  

Scott, Daniel J. (2005)  
Communication/Assistant  
Forensics Coach  
A.A., Fresno City College  
B.A., California Polytechnic University, San Luis Obispo  
M.A., California State University, Fresno  

See, Charles (2015)  
Automotive Collision Repair (CTC)  
A.A., Fresno City College  

Semien, Kenneth (2005)  
Counselor  
B.S., McNeese State University, Louisiana  
M.S., National University, Fresno  

Shirey, Melinda (2006)  
Business & Technology  
B.A., M.A., Fresno Pacific University  

Shoemaker, David M. (2018)  
Counselor/Coordinator, Transfer Center  

Shultz, Joseph (1996)  
Radiologic Technology  
B.S., California State University, Fresno  
M.Ed., National University  

Silva, Leslie (2001)  
Counselor, Disabled Students Programs and Services  
A.A., Kings River Community College  
B.A., M.S., California State University, Fresno  

Siroky, Allen (1999)  
History  
B.A., Rocky Mountain College  
M.A., Trinity College  
Ph.D., City University of New York  

Slater, Emilee  
Director, College Relations and Outreach  
B.A., M.A., Fresno Pacific University  

Slaton, Rebecca L. (1991)  
Psychology  
B.A., California State University, Fresno  
M.S., Ph.D., University of California, Santa Cruz  

Smith, Lorraine M. (2005)  
Dean of Instruction, Allied Health, Physical Education and Athletics  
B.A., Harvard University  
M.B.A., National University  

Smith, Mary (2009)  
Nurse  
A.A., A.S., Fresno City College  
B.A., University of California, Davis  
F.N.P., M.S., California State University, Fresno  

Solberg, Eric (1999)  
Physical Education  
B.S., California State University, Fresno  
M.S., U.S. Sports Academy  

Sosa, Susan L. (2005)  
Art History  
B.A., California State University, Fresno  
M.A., Stanford University  

Soto, Ernestina (2010)  
Nursing  
B.S.N., M.S.N., California State University, Fresno  

Sousa, Daniel J. (1992)  
Apprenticeship  
A.A., Fresno City College  
B.S., M.S., California State University, Fresno  

Spohrer, Nicholas (2006)  
Art, Printmaking  
B.A., University of California, Santa Cruz  
M.F.A., University of Nebraska  

Spomer, Kalisha (2019)  
Counselor  
B.A., California State University, Long Beach  
M.S.W., California State University, Fullerton  

Staebler, Diane (2013)  
Biology  
B.A., M.A., California State University, Fresno  

Stavytska-Barba, Marina (2015)  
Chemistry  
A.S., Merced College  
B.S., East Ukrainian National University  
B.S., California State University, Stanislaus  
Ph.D., University of California, Merced  

Steeley, Jodie (2016)  
Director of Distance Education  
A.A., Modesto Junior College  
B.A., California State University, Stanislaus  
M.A., California State University, Sacramento  
Ph.D., Capella University  

Stenger, Kristen (2017)  
Food & Nutrition  
B.S., M.S., University of Nebraska-Lincoln  

Stewart, Richard (2001)  
Biology  
A.A., College of the Sequoias  
B.A., M.A., California State University, Fresno  

Stewart-Magee, Kevin (2015)  
Art  
B.F.A., Ohio State University  
M.F.A., California State University, Fullerton  

Strait, Laura (2016)  
Mathematics  
B.A., M.A., California State University, Fresno  

Stricker, Terrelyn Rhymes (1984)  
Accounting, Decision Science  
B.S., M.B.A., California State University, Fresno  

Tackett, Patrick (2017)  
Counselor, Disabled Students Programs & Services  
A.A., C.A.S., M.S., M.F.A., California State University, Fresno  

Takeda, Michael (2014)  
English  
B.A., Sonoma State University  
M.A., Fresno Pacific University  

Tannen, Jeffery (2008)  
English  
B.A., M.F.A., California State University, Fresno  

Tarazi, Teresa (2000)  
English  
B.A., M.A., California State University, Fresno
Teeple, John (2011)  
Geography  
B.A., M.A., University of Kansas

Temmerman, Simon (2011)  
Mathematics  
B.A., M.A., California State University, Fresno

Thepphavong, Khamphon (2014)  
Counselor  
A.A., Fresno City College  
B.A., M.A., California State University, Fresno

Thomas, Fred (2017)  
Dental Hygiene  
A.A., A.S., Fresno City College  
B.S., California State University, Fresno  
M.S.A., California State University, Bakersfield

Thurston, Gerald (2003)  
Communication  
B.A., M.A., California State University, Fresno

Tibstra, Robert (2017)  
Biology  
A.A., Cabrillo College  
B.S., M.S., California State University, Fresno

Trelawny, Dillon (2016)  
Physics/Astronomy  
B.S., James Madison University, Harrisonburg, VA  
M.S., California State University, Fresno

Trevino, Julio (2013)  
English  
B.A., M.F.A., California State University, Fresno

Trezza, Mark J. (2004)  
Political Science  
B.A., University of California, Davis  
M.A., California State University, Sacramento

Accounting  
B.A., California State University, Long Beach  
M.B.A., California State University, Fresno

Ugwu-Oju, Dympna (1994)  
Journalism  
B.A., Briarcliff College  
M.S., Syracuse University  
Ph.D., California State University, Fresno  
and University of California, Davis

Uvarov, Catherine (2016)  
Chemistry  
B.S., Ph.D., University of California, Davis

Valentino, Mary Ann (2004)  
Psychology  
B.A., San Diego State University  
Ph.D., California School of Professional Psychology

Dean of Instruction, Fine, Performing and Communication Arts Division  
B.A., Brigham Young University  
M.F.A., University of Oregon

Vang, Linda (2007)  
Sociology  
B.A., Mount Union College  
M.S.W., M.A., University of Pittsburgh  
Ed.D., University of California, Davis/California State University, Fresno

Psychology  
A.S., Columbia College  
B.S., M.S., California State University, Fresno

Mathematics  
B.A., California State University, Fresno  
M.A., Fresno Pacific University

Villalba, Tabitha (2009)  
Dean of Instruction, Academic Services and Humanities Pathways Division  
B.A., M.F.A., California State University, Fresno

Vinicor, Melinda (2009)  
Sociology  
B.A., Pepperdine University  
M.A., San Jose State University

Wells, Bobbie (2017)  
Disabled Students Programs & Services  
M.S., California State University, Fresno

Wen, Julie (1990)  
Developmental Mathematics  
B.Ed., National Taiwan Normal University  
M.A., California State University, Fresno  
M.A., Fresno Pacific College

Wengert, Bethany (2008)  
Anthropology  
B.A., California State University, Fresno  
M.A., California State University, Fullerton

Williams, Forrest (2007)  
Psychology  
B.A., M.A., California State University, Chico

Williams, Jacqueline (2017)  
English  
B.A., M.F.A., California State University, Fresno
Williams, Rhonda (1999)  
*Physical Education*  
B.A., Fresno Pacific  
M.A., California State University, Fresno  

Williams, Ria (2015)  
*English*  
B.A., M.F.A., California State University, Fresno  

Williams, Karen N. (2019)  
*Mathematics*  
A.S., Fresno City College  
B.A., M.A., California State University, Fresno  

Wilson, Elisha (2018)  
*Music Theory*  
B.A., M.A., California State University, Fresno  

*Mathematics*  
B.A., M.A., California State University, Fresno  

Woods, Timothy (2010)  
*Dean of Instruction, Business Division*  
B.A., University of California, Riverside  
M.A., California State University, Fresno  
Ph.D., Walden University  

Wright, Brian L. (2019)  
*Electrical Systems Technology*  
B.S., M.S., California State University, Fresno  

Yang, David (2013)  
*Mathematics*  
B.A., M.A., California State University, Fresno  
Ph.D., University of California, San Diego  

Yang, Jim (2016)  
*Mathematics*  
B.A., M.A., California State University, Fresno  

Yang, Mai (2007)  
*Librarian*  
B.A., California State University, Fresno  
M.A., University of Illinois, Urbana  

Yang, Shou (2014)  
*EOPS Counselor*  
B.A., M.S., California State University, Fresno  

Yang, Victor Bee (1999)  
*Counselor*  
B.S., University of Nebraska at Omaha  
M.S., National University  

Yates, Seth (2010)  
*Chemistry*  
B.A., Fresno Pacific University  
M.S., California State University, Fresno  

Ybarra, Kerry (2007)  
*Philosophy/Humanities*  
B.A., California State University, Fresno  
M.A., California State University, San Francisco  
M.A., University of Colorado, Boulder  

Zamora, Kenneth C. (1992)  
*Architecture*  
A.A., College of the Sequoias  
B., A., California Polytechnic University, San Luis Obispo  

Zendejas, Frank (2016)  
*Electrical Systems Technology*  
B.S., California State University, Fresno  
Ph.D., University of California, Berkeley  

Zierfuss-Hubbard, Pammella (2018)  
*Director of Athletics*  
B.A., California State University, Sacramento  
M.A., University of San Francisco  
M.B.A., University of Alaska, Fairbanks
## Classified Professionals

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<tr>
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<tr>
<td>Erica Abbs</td>
<td>Administrative Assistant</td>
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<td>Aaron Acevedo</td>
<td>Financial Aid Specialist</td>
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<td>Norma Aguilar</td>
<td>Financial Aid Analyst</td>
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<td>Enrique Alameda</td>
<td>Science Laboratory Coordinator</td>
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<td>Stephanie Alaniz</td>
<td>Administrative Assistant</td>
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<td>Horacio Alaniz, Jr.</td>
<td>Custodian</td>
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<td>Jose Alcorta</td>
<td>Custodian</td>
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<td>Justina Alvarado</td>
<td>Senior Admissions and Records Assistant</td>
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<td>Frank Anaya, III</td>
<td>Career Technical Education Laboratory Technician</td>
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<td>Kristie Andersen</td>
<td>Senior Administrative Services Technician</td>
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<td>Thomas Andrews</td>
<td>Utility Worker</td>
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<td>Ivy Arana</td>
<td>Bookstore Shipping and Receiving Specialist</td>
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<td>Joanna Arenas</td>
<td>Administrative Assistant</td>
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<td>Jamien Armstrong</td>
<td>Senior Library Technician</td>
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<td>Moses Avila</td>
<td>Audio Visual Technician</td>
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<td>Carrie Baize</td>
<td>Administrative Assistant</td>
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<td>Arthur Baylon</td>
<td>Custodian</td>
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<td>Virginia Beamer</td>
<td>Administrative Assistant</td>
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<td>Joshua Beaulieu</td>
<td>Career Technical Education Laboratory Technician</td>
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<td>Gurpreet Bhogal</td>
<td>Administrative Assistant</td>
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<td>Stephanie Bisbee</td>
<td>Nursing Skills Laboratory Technician</td>
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<td>Jocelyne Bonilla</td>
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<tr>
<td>Kathleen Bonilla</td>
<td>Public Information Officer</td>
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<tr>
<td>Michael Bourbonnais</td>
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<td>William Bowlin</td>
<td>Senior IT Customer Support Technician</td>
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<tr>
<td>Kevin Boyle</td>
<td>Textbook Purchasing Specialist</td>
</tr>
<tr>
<td>Anthony Bravo</td>
<td>Outreach Specialist</td>
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<tr>
<td>Kathy Braze</td>
<td>Program Assistant – Career Technical</td>
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<tr>
<td>Cristina Bremer</td>
<td>Director of Marketing and Communications</td>
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<tr>
<td>Richard Briones</td>
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<td>Eleanor Bruce</td>
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<td>Kristi Bryan</td>
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<td>Melanie Bryant</td>
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<td>Omar Gutierrez</td>
<td>Vice President of Administrative Services</td>
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<td>Maria Handy</td>
<td>Library Operations Coordinator</td>
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<td>Tamara Herman</td>
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<td>Andres Hernandez</td>
<td>Director of Admissions and Records</td>
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<td>Monica Hernandez</td>
<td>PE/Athletic Equipment Assistant</td>
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<tr>
<td>Randal Hernandez</td>
<td>Help Desk Technician</td>
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<td>Sheng Herr</td>
<td>Budget Technician</td>
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</tbody>
</table>
Kellie Higashida  
Office Assistant III

Barbara Hinkle  
Program Assistant — Career Technical

Lavell Hopkins  
Custodian

Josefa Huckeba  
Program Assistant — Student Services

Linda Jackson  
Senior Library Technician

Fidel Jauregui  
Custodian

Dale Jimenez  
Accounting Technician

Donnie Johnson  
Athletic Equipment Manager

Susan Johnson  
Senior Program Specialist — Career Technical

Marvin Jordan, II  
Custodian

Sarina, Karr  
Office Assistant II

Aarne Kela  
Piano Accompanist

Kaylee Kelly  
Sign Language Interpreter

Israel Kinlow  
Financial Aid Specialist

Cathleen Kozlowski  
Budget Specialist

Charles Krulowec  
Research and Planning Analyst

Renee Kubo  
Senior Library Technician

Christopher Lang  
Theatre Technical Manager

Joseph Lescoulie  
Senior IT Customer Support Technician

Melissa Llanes  
Executive Assistant

Priscilla Lockhart  
Admissions and Records Assistant I

John Loera  
Evaluator

Stephanie Lopez Pedrosa  
Senior Admissions and Records Assistant

Benjamin Lozano  
Digital Media and Graphic Designer

John Luna  
Custodian

Rita Luna  
Office Specialist

Brittany Lusk  
Science Laboratory Coordinator

Crystyn Lynch  
Office Assistant II

Linda Lyness  
Payroll Technician

Mayra Machain  
Budget Technician

Tamara Maddox  
Business Office Manager

Javier Madrigal  
Sign Language Interpreter

Sunnie Mahavong  
Admissions and Records Specialist

Rosemary Mahoney  
Senior Admissions and Records Assistant

Delia Makel  
Digital Media and Graphic Designer

Josephine Mancillas-Llanos  
Scholarship Specialist

Eleni March  
Evaluation Specialist

Janine Marklund  
Outreach Specialist

Christopher Martin  
Senior IT Customer Support Technician

Nora Martin  
Accounting Technician

Sean Martin  
Lead Audio-Visual Systems Specialist

Beatrix Martinez  
Sign Language Interpreter

Luis Jauregui Martinez  
Custodian

Patricia Martinez  
Instructional Assistant

Tiffany Martinez  
Early Childhood Education Specialist

Mary Mathos  
Financial Aid Specialist

Mary Mattern  
Early Childhood Education Specialist

Keelin McCabe  
Executive Assistant

Samantha McGregor  
Admissions and Records Assistant II

Shannon McKibben  
Executive Assistant

Mark McNiff  
Senior Program Specialist — Student Services

Barbara Mendoza  
Textbook Purchasing Specialist

Tamra Miller  
Administrative Assistant

Jeannie Morgan  
Budget Technician

Jennifer Mungia  
Box Office Manager

Jose Munoz  
Custodian

Haneen Musleh  
Sign Language Interpreter

Jennifer Nassar  
Accounting Technician

Elvira Navarro-Arellano  
Program Specialist — Student Services

Nathan Newsom  
Custodian

Debra Nichols  
Web Content Engineer

Laurie Nichols  
Program Assistant — Student Services

Mark Nichols  
Senior IT Customer Support Technician

Susan Nitzel  
Professional Development Coordinator
Kelli O'Rourke
Senior Curriculum Analyst
Francisco Olvera
Custodian
Christopher Orr
Custodial Manager
Emelita Pacada
Admissions and Records Assistant II
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Budget Specialist
Cynthia Peek
Tutorial Assistant
Denise Perea
Program Assistant – Student Services
Darren Perez
Sign Language Interpreter
Joshua Petersen
Senior Library Technician
Maria Petrogonas
Early Childhood Education Associate
Channie Phantharath
Evaluator
Amanda Phillips
Evaluator
Henry Polanco, Jr.
Custodian
Nicole Pondexter
Office Specialist
Ronald Potter, Jr.
Utility Worker
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Administrative Assistant
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Budget Specialist
Carlos Puente, Jr.
Custodian
Kim Quesada
Executive Assistant to the President
Jeanette Quiroz
Financial Aid Specialist
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Charles Record
Custodian
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Budget Technician
Edwin Reed
Custodian
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Michael Richards
Lead Custodian
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Financial Aid Specialist
Melody Riversmith
Office Specialist
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IT Customer Support Technician
Heather Rodriguez
Financial Aid Assistant
Sarah Rodriguez
Admissions and Records Assistant II
Amanda Romero
Office Assistant I
Ryan Rooks
IT Customer Support Technician
Roy Rosa
Financial Aid Specialist
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Custodian
Miguel Sanchez
Custodian
Penny Sandlin
Instructional Administrative Assistant
Delfina Sandoval
Program Assistant – Career Technical
Suzanne Sankey
Automotive Parts Technician
Jeffrey Santellano
Instructional Computer Laboratory Technician
Frances Santillan
Custodian
Janet Santillan
Bookstore Merchandise Purchasing Specialist
Roland Schreiner
Systems Administrator
Lorraine Sepeda
Job Developer
Kimika Simmons
Sign Language Interpreter
Anthony Slade
Custodian
Emilee Slater
Director of College Relations and Outreach
Phila So
Office Assistant II
Eddie Stollifer II
Custodian
Amy Strobel
Senior Sign Language Interpreter
Mark Tabay
Student Communications Specialist
Gina Tarvin
Accountant
Bobbie Tello-Perez
Admissions and Records Specialist
Meng Thao
PE/Athletic Equipment Assistant
Pamela Tibbet
Special Program Specialist – Student Services
Andrea Torrez
Office Specialist
Robert Torrez
Assessment Coordinator
Scot Unruh
Custodian
Ruthann Van Buren
Office Specialist
Teng Vang
Senior Budget Analyst
Majru Varughese  
Science Laboratory Coordinator

Jessica Vasquez  
Sign Language Interpreter

Luis Villanueva  
Custodian

Joel Villar  
Career Technical Education Laboratory Technician

Alberto Villegas-Villagomez  
Utility Worker

Lisa Vincent  
Outreach Specialist

Ashley Watkins  
Athletic Trainer

Jill Webb  
Piano Accompanist

Leah Whitaker  
Office Specialist

Chelsey White  
Sign Language Interpreter

Maria Wiget  
Instructional Assistant

Artie Williams  
Lead Custodian

Phyllis Willis  
Administrative Assistant

Jonathan Wilson  
Academic Technology Systems Specialist

Nancy Withrow  
Senior Admissions and Records Assistant

Daniel Wong  
Arts Laboratory Technician

Janice Wong  
Senior Program Specialist – Student Services

Sara Woody  
Print Services Technician

Mary Beth Wynn  
Job Developer

Moua Xiong  
Senior Library Technician

Toupheng Xiong  
DSP&S Mobility Driver

Houa Yang  
Senior Program Specialist – Student Services

John Yang  
Senior Program Specialist – Student Services

Neng Yang  
Custodian

Pa Nhia Yang  
Early Childhood Education Associate

Pao Yang  
Mail Room Worker

Amy Yocupicio  
Administrative Services Technician

Ramon Zapata  
Career Technical Education Laboratory Technician
<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
<th>Department/Specialization</th>
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<tr>
<td>Aquilar, Luis E.</td>
<td>1985-2014</td>
<td>Automotive Collision Repair (CTC)</td>
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<td>Albright, Linda S.</td>
<td>1981-2009</td>
<td>Nurse</td>
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<td>Andersen, L. LeGrand</td>
<td>1974-1999</td>
<td>Vocal Music</td>
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<td>2000-2011</td>
<td>Respiratory Therapy</td>
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<td>1968-1984</td>
<td>Philosophy, English</td>
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<td>1983-2018</td>
<td>Counselor</td>
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<td>1969-1999</td>
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<td>Photography</td>
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<td>Business Administration, Management</td>
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<td>Computer Information Technology</td>
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<td>Child Development</td>
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<td>1974-1990</td>
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Cheney, Judith  
1999-2016  
Dental Hygiene

Chow, Richard  
1968-1991  
Reprographics, Industrial Education

Christian, Peter C.  
1958-1981  
English

Christl, Richard I.  
1970-2011  
Dean of Instruction, Applied Technology Division

Cleveland, Sandra  
1976-2007  
Nursing

Colby, Camilla  
1969-2007  
Spanish

Cole, Wayne  
1990-2011  
English

Contreras, Luis A.  
1999-2019  
English

Cornwell, Gerald D.  
1961-1990  
Business

Covington, Jeanette A.  
1982-2014  
Learning Disabilities, English

Crider, Andrew B.  
1998-2012  
Director of Career & Technology Center

Culp, Robbey C.  
1995-2010  
Chemistry

Cummings, John H.  
1996-2011  
Vice President, Admissions and Records

Curry, Ruth  
1981-1998  
Philosophy, English, Humanities

Dana, Michael E.  
1990-2018  
Music

Davy, Thelma L.  
1965-1973  
English

Deeter, Gary  
1981-2008  
Music

DeKoning, Richard M.  
1958-1982  
Drafting, Mathematics, Architecture, Industrial Education

Demanett, Paula  
2000-2019  
Librarian

Denver, Monta  
1986-2019  
Dental Hygiene

DePry, Ronald N.  
1970-1993  
Biology

Dickie, David R.  
1965-1996  
Drafting, Industrial Education

Discont, Conrad M.  
1963-1994  
English, Humanities, Speech

Dose, Kenneth D.  
1971-1999  
Physical Education

Dotts, John  
1981-1996  
Industrial Education, Construction, Mathematics

Dougherty, Sara  
1955-1981  
Physical Education

Douty, Douglas A.  
1984-2012  
Electronic Technology

Doyland, Russell A.  
1961-1983  
Accounting

Drake, Carolyn C.  
1978-2013  
Dean of Instruction, Health Sciences Division

Drapor, C. Dean  
1960-1987  
Art

Dzerigian, Steven V.  
1987-2008  
Photography

Eckenrod, Sherian H.  
1979-2003  
Associate Dean of Instruction, Business Division

Edison, James S.  
1997-2019  
Coordinator, Police Academy

Edman, Leland M.  
1975-1991  
Administration of Justice

Eischen, Clifford  
1964-1998  
Business Administration, Management

Elgin, Judy A.  
1987-2010  
Business and Technology

Elgorriaga, Carmen  
1970-1994  
English, Spanish

Elizondo, Tonatiuh  
1993-2019  
Automotive Mechanics (CTC)

Elliott, Jacqueline  
1995-2006  
Art

Emerling III, Fred M.  
1984-2013  
Counselor

Emerzian, Janice M.  
1975-2017  
Director of Disabled Students Programs & Services

Engel, Kathleen  
1980-2008  
Nursing

Engstrom, Dale  
2001-2016  
Music

Estrada, Gonzolo  
1965-1984  
English

Estrada, Joan E.  
1964-1989  
Accounting

Ewing, James  
1990-2013  
English
Farley, Lee
1981-2015
Dean of Students, EOPS

Farrington, Gerald
1970-2003
History, Political Science

Ferguson, Phillip
1972-1982
Mathematics

Fischer, Laurene J.
1965-1995
Business Administration, Computer Information Technology

Fox, Robert E.
1980-2009
Vice President of Students

Franz, James J.
2000-2008
Economics

Frese, Joan
1995-2016
Computer Information Technology

Fries, Bobby
1965-1991
Health Education, Track

Fuller, Pauline M.
1977-2013
Counselor

Gaither, Loren F.
1964-1996
Mathematics

Gaona, Venancio Garcia
1969-1999
Spanish

Garoupa, Clifford
1997-2019
Sociology

Gartman, Grace
1989-2005
Tutorial Resources

Gennity, Joseph M.
1996-2019
Biology

Gibbs, Richard R.
1966-1994
Economics, Psychology

Glenn, Marilyn R.
2002-2014
Counselor

Gonzales, Paul
1989-2007
Radiologic Technology

Graham, Ronald J.
1987-2005
Criminology

Granata, Charity
1985-2018
Communication Arts

Green, M. Fred
1962-1984
Engineering

Grover, Stanford C.
1966-1977
Counselor

Grover, Stephen C.
1984-2015
Mathematics

Guglielmino, Rosemarie Spight
1989-2017
English

Gunn, Donald L.
1971-1992
Theatre Arts, Speech

Hald, Kenneth
1949-1972
Biological Sciences

Halls, Thomas H.
2001-2019
Photography

Hallstone, Kenneth
1966-2002
Psychology

Handley, Richard
1955-1980
Associate Dean of Instruction, Occupational Education

Hanson, William F.
1946-1978
Director, Vocational Training Center

Harmon, Beverlee Jill
1990-2012
Counselor

Haroutunian, Vahack
1971-1996
Mathematics

Harriet, Sydney H.
1970-2012
English, Speech

Hayden, Layne E.
1999-2007
Automotive Collision Repair

Hendrickson, David H.
1958-1984
Geography, History

Hendry, Harold T.
1966-1984
Business Administration

Hibler, Edward B.
1961-1978
Psychology

Hickman, Katherine
2001-2016
Criminology

Hildreth, Sonya
2007-2010
Dean of Student Services, Counseling and Guidance

Hill, Jack
1956-1980
Marketing, Advertising

Himes, Daniel J.
1987-2017
Electrical Systems Technology

Hiroyasu, Shaw
1975-1996
Automotive Mechanics, Industrial Education

Hoff, Nancy
1981-2007
Nursing

Holford, Susan
2001-2017
Human Services, Sociology

Holstein, George C.
1955-1966
Dean of Admissions & Records

Honda, Lorence
1997-2018
Music

Hostetler, Robin L.
1979-2011
Geography

Jansen, Janice R.
1975-2004
Physical Education, Dance
Jeanis, Dorothy I.  
1969-1995  
Business Administration, Management

Jimenez, Joaquin  
1988-2004  
District Associate Dean of Financial Aid

Johal, Sarbjeet  
1999-2018  
Political Science

Johnston, H. Bruce  
1966-1996  
Biology

Kadingo, Carol J.  
1984-2018  
Physical Education

Kane, Linda  
1999-2015  
Disabled Student Programs and Services

Keen, Derl W.  
1975-2001  
Child Development

Keller, Charles F.  
1977-2013  
Adaptive Physical Education

Kennedy, Harry L.  
1984-2005  
Journalism, English

Khoury, Alexis  
1990-2008  
English

Kim, Daniel E.  
1989-2014  
Coordinator, Institutional Research

Kimura, Robert H.  
1963-1984  
Chemistry

King, Charles G.  
1958-1990  
Electronic Technology, Industrial Education

Kirkhart, Jerry L.  
1989-2005  
Biology

Kizzair, Robert  
1999-2012  
Art, Ceramics

Klein, Kenneth A.  
1968-1999  
Architectural Drafting

Koshears, Jeannine  
2005-2019  
Geography

Krauter, Larry  
2008-2017  
Photography

Kriessels, L. Anne  
1974-1990  
Counseling (Enabler)

Krueger, Rodney L.  
1965-1991  
Art

Kuiper, H. Peter  
1968-1993  
Speech, English, Philosophy

Kulbeth, Jean  
1997-2013  
Dental Hygiene

Lane, W. Keith  
1968-2005  
Business Administration/Marketing

Larson, Donald G.  
1964-1999  
History

Lasher, Ivan Ward  
1971-1992  
Associate Dean of Students, Admissions and Records

Latham, S. E.  
1963-1983  
Sociology

Leatham, Leneve S.  
1959-1974  
Marketing, Mathematics

Leon, Godfrey R.  
1972-1990  
Automotive Technology, Industrial Education

LeValley, Aina D.  
1961-1972  
Vocational Nursing

Lewis, Kristin  
1995-2017  
English

Leyden, Francis J.  
1948-1975  
Geology

Liberty, Susan  
1976-1999  
Director, Fine and Performing Arts, Developmental Education, Honors

Liddle, Lee D.  
1989-2007  
Business & Technology

Lindley, Edward V.  
1984-2010  
Chemistry

Lindsey, Cecil  
1976-2011  
Electronic Technology

Lindstrom, Richard  
1994-2016  
Director, Police Academy

Liscano, Tanya  
1974-2001  
Librarian

Locker, Theodore A.  
1965-1990  
English

Lopez, Bradley  
1975-2013  
Health Science

Lopez, Matthew  
1971-1991  
Welding

Lopez, Rachel G.  
1990-2015  
English

Luck, Emory F.  
1984-2004  
Physical Education

Luckenbach, Roger  
1998-2012  
Biology

Lund, Edward L.  
1988-2008  
Counselor, Disabled Students Programs & Services

Machado, Gayle  
1996-2012  
Mathematics

Makofske, James P.  
1989-2017  
Accounting, Computer Information Technology
Marks, William A.
1959–1992
Industrial Education, Air Conditioning
Marshall, Thomas A.
1962–1987
Psychology
Martin, Lawrence
1957–1981
Accounting, Native American Studies
Martin, Merle
1950–1980
Dean of Students
Martin, Sheila
1990–2018
Business & Technology
Maruko, Eiji
1976–1997
Music
Mascarenas, Timothy E.
1971–2004
Automotive Technology
Mateo-Laeno, Mary Ann
1990–2007
Child Development
Mattox, Jack V.
1966–2001
Health Science
McCarthy, John R.
1951–1977
Health Education
McCain, Mary Jane
1999–2011
Medical Assisting Surgical Technology
McCormack, Ethel
1930–1961
Secretarial Science, Dean, Business Division
McCully, Brian J.
1989–2015
Paralegal
McCully, Clyde C.
1967–1986
President
McHenry, James A.
1965–2001
Biology
Mendez, Linda
1999–2018
Counselor
Merlier, Christiane M.
1984–2008
ESL, French
Meserve, Peter
2001–2018
Geography
Meyer, Kent R.
1962–1987
Accounting
Miller, Mary E.
1960–1984
Secretarial Science
Moller, Richard T.
1968–1990
Mathematics
Moncibais, Gordon
2011–2016
Fire Technology
Mooneyham, David E.
2003–2019
Maintenance Mechanic (CTC)
Moore, Bessie M.
1971–1984
Vocational Nursing
Moore, Joseph Jr.
1966–1999
History, Political Sciences
Moore, Marilyn
1984–2013
Child Development
Moorehouse, Richard L.
1974–1993
Director, Dental Hygiene Program
Moran, Charles L.
1959–1989
Botany, Biology
Morgan, Carl H.
1955–1973
Physics, Mathematics
Muldoon, Marcia
1995–2006
English
Munshower, Donald
1984–2003
Counselor
Murphy, Connie J.
1984–2007
Business & Technology
Naimpally, Ashok
2007–2014
Dean of Instruction, Mathematics, Science and Engineering Division
Neal, Stanley B.
1990–2005
Welding, Metal Fabrication
Neal, William A.
1961–1990
Mathematics
Nelson, Carl C.
1966–1994
Biology
Neuman, Darlene H.
1962–2000
Business & Technology
Nielsen, Robert
1961–2001
Music
Nishimoto, Henry
1980–2007
Economics
Nitzsche, Eric J.
1996–2019
Construction
Ogden, Gordon L.
1975–1994
Director, Health Sciences
Ohanian, Gregory
1999–2015
Physics, Engineering
Okkerse, Victor J.
1959–1984
Secretarial Science
Olson, Kenneth E.
1990–2012
Electronic Technology, Automated Technologies
Osborne, Leon
1959–1995
Art
Ostrander, Theodore E.
1989–2018
Mathematics
Owens, Kenneth B.
1963-1999
Art

Parks, John L.
1996-2009
Air Conditioning

Pauls, Albert N.
1963-1990
Secretarial Science

Paulson, Richard S.
1955-1984
Speech

Paz, Isias E.
1971-1996
Spanish, German

Peart, Gilbert M.
1958-1977
Marketing

Perkins, Alvan E.
1964-1990
Counselor

Pool, June E.V.
1956-1984
Vocational Nursing

Poole, Thomas Craig
1999-2019
Geology

Porter, Ralph W.
1971-2003
Biology

Putnam, Marlene S.
1984-2001
Business & Technology

Quercia, Olga
1996-2014
Music

Quinn, Charles T.
1970-2003
Theatre Arts, Speech

Quintana, Frank M.
1970-2006
Associate Dean of Instruction, Fine, Performing, and Communication Arts Division

Racki, David
1985-2013
Librarian

Rail, Lester DeWayne
1971-2000
Director, Arts, Honors & Student Success

Ramay, Morris W.
1972-2000
Respiratory Care

Ramon, Frank
1972-2010
Director, Financial Aid

Rawate, Prabhu
1990-2005
Chemistry

Reid, Birt
1973-2007
Counselor

Reynolds, Jr., William A.
1957-1978
French

Reznik, Zwi
1990-2010
Mathematics

Richardson, Robert L.
1968-2005
Counselor

Ritter, James J.
1984-2002
Maintenance Mechanic (CTC)

Rios, Cruz F.
1976-1986
Automotive Mechanics

Roach, Darlene
1985-2012
Counselor

Roberts, Michael
1992-2015
English

Rohrer, Martha J.
1976-1981
Home Economics

Rooks, Clay
1999-2019
English

Rose, Bronwen Wendy
1984-2003
Native American Studies

Ross, James Edward
1971-2002
Mathematics

Rowe, Andrew F.
1962-1990
Mathematics

Ruston, James R.
1967-1995
English, Speech

Ryan, Judy L.
1988-2015
English

Ryska, John W.
1965-1982
Counselor

Sabbatini, LeRoy A.
1976-1999
Automotive Collision Repair

Saddler, James
1990-2008
English

Safer, Joseph
1963-1985
Data Processing

Sakata, Kenneth
1981-2003
Cabinetmaking Technology

Sall, Gerald
1977-2007
CTC Counselor

Salrin, Ralph E.
1961-1986
Accounting

Sample, Brooke
1990-2016
Instructor, Disabled Students Programs and Services

Sandau, Richard R.
1959-1983
English

Santos, Richard
1994-2019
Linguistics, English for Multi-Lingual Students

Sausen, Barbara
1981-2008
Mathematics

Scambray, Terry A.
1967-2001
English
Scheid, Anne F.  
1991-2015  
Art

Schneider, Dennis  
1981-2011  
Business Administration/Marketing

Scott, Ronald A.  
1990-2018  
Physical Education

Scott, Rueben A.  
1971-2005  
English, Philosophy

Scott, William F.  
1967-1984  
Geography

Seaberg, William  
1980-1998  
Associate Dean of Instruction, Learning Resources

Seely, Irene O.  
1989-2009  
Biology

Shelley, Deborah  
2008-2018  
Biology

Shepard, James H.  
1987-2005  
Art

Shine, G. Dennis Jr.  
1968-1993  
Economics, Business Administration

Shirley, W. Delton  
1968-2001  
Biology

Simba, Ceroasetta  
1997-2013  
English

Smith, Bernice V.  
1972-1978  
Librarian

Smith, Bonnie  
1996-2019  
Computer Information Technology

Smith, Dorothy E.  
1965-1978  
Nursing

Smith, Shannon  
1958-1980  
Flight Science, Industrial Education

Solwazi, Kehinde  
1970-2011  
African-American Studies

Sorensen, Royal  
1976-1978  
Microbiology

Sosa, Luis R.  
1977-1993  
Sociology, Human Services

Spencer, Lowell  
1948-1978  
Music

Spolsdoff, John  
2000-2008  
Director, Student Success & Honors

Stanley, Vance  
1972-1999  
Physical Education

Statham, Yolanda A.  
1964-1984  
English

Stilwell, Shirley B.  
1962-1984  
Physical Education

Stephenson, Wendell  
1999-2019  
Philosophy

Stokle, J. Gerald  
1967-1999  
Associate Dean of Instruction, Social Science Division

Stone, Carol J.  
1990-2010  
Home Economics

Stubblefield, Gertrude  
1930-1960  
Secretarial Science

Susnick, Ruthford  
1999-2010  
Automotive Mechanics CTC

Syvertson, William A.  
1990-2015  
Business Administration/Marketing

Takeuchi, Leo S.  
1959-1992  
Associate Dean of Instruction, Technical & Industrial Division

Taylor, Mary A.  
1975-2011  
Nursing

Temple, Donald  
1990-2016  
Decision Science/Computer Information Technology

Terry, Blair  
1974-2001  
Accounting

Tessler, Brian  
1999-2018  
Physical Education

Thiessen, Jolene  
2001-2018  
Business & Technology

Thomas, Pamela  
1984-2013  
English

Tognazzini, Eugene A.  
1984-2011  
Mathematics

Toomasian, John  
1961-1995  
History

Tucker, James  
2006-2011  
Dean of Instruction, Library and Student Learning Support Services

Valencia, Richard  
1976-2007  
Sociology

Van Gerpen, Maurice  
1959-1999  
Political Science

Van Vleet, Patricia N.  
1991-2017  
Linguistics, English for Multi-Lingual Students

Velasquez, Sarah  
2007-2017  
Political Science

Vinicor, Donald J.  
1970-1997  
Chemistry
Waddle, Carl D.  
1965-1997  
Associate Dean of Instruction, Humanities, and Health Sciences & the Arts

Wall, Kenneth G.  
1979-2002  
Construction

Walzberg, Laura Ann  
1985-2014  
Nursing

Wash, Dennis C.  
1974-1996  
Air Conditioning, Industrial Education

Waters, Rosemary  
1972-2009  
Biology

Watson, Donald G.  
1968-2005  
Counselor

Watts, Ann  
2008-2016  
Director of CalWORKs

Wayte, William R.  
1968-1999  
Physical Education

Weinschenk, Franz A.  
1954-1980  
Associate Dean of Instruction, Humanities

Weidenhoefer, Hans  
1948-1984  
Director of Athletics, Physical Education

Whitt, C. Thomas  
1969-2001  
Criminology

Wilson, Vernon L.  
1976-1988  
Radiologic Technology

Woodman, Joseph B.  
1948-1976  
Auto Mechanics

Woodruff, Jr., Elbert N.  
1971-1984  
English

Woods, Mary Ann  
1989-1999  
Medical Assisting, Health Information Technology

Wosika, Kathleen A.  
1975-2012  
Art

Wrzalinski, Eugene S.  
1984-2003  
Environmental Technology

Yarbrough, Thomas  
1997-2014  
Engineering

Yates, Susan  
1984-2013  
Athletic Director, Physical Education

Young, Nain T.  
1962-1984  
Registered Nursing

Zepeda-Esparza, Josephine  
1969-1995  
English, Spanish

In Memoriam

Dr. Ward Lasher  
Associate Dean of Admissions & Records

Renato Martinez  
Spanish Instructor

William F. Templer  
Physical Geography, Earth Science Instructor

2019-2020 Fresno City College Catalog
### Emeritus Classified Professionals

<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
<th>Position</th>
</tr>
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<tbody>
<tr>
<td>Aeikens, Patricia</td>
<td>1983-2016</td>
<td>Accounting Technician I</td>
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<tr>
<td>Aguilar, Yolanda</td>
<td>2001-2011</td>
<td>Student Services Specialist</td>
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<td>Anderson, Robin</td>
<td>1979-2011</td>
<td>Department Secretary</td>
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<tr>
<td>Andrews-Boock, Sharon</td>
<td>1988-2008</td>
<td>Administration Aide</td>
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<td>Archuleta, Irene</td>
<td>1990-2004</td>
<td>Administrative Aide</td>
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<tr>
<td>Baiz, Edward</td>
<td>2006-2018</td>
<td>General Utility Worker</td>
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<tr>
<td>Barber, Joan</td>
<td>1974-2007</td>
<td>Office Assistant III</td>
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<td>Barile, Howard</td>
<td>2001-2018</td>
<td>Accounting Technician I</td>
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<td>Barlow, John</td>
<td>1991-2011</td>
<td>Custodian</td>
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<tr>
<td>Barnett, Karin</td>
<td>2003-2011</td>
<td>Textbook Purchasing Clerk</td>
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<td>Barrett, Jeffrey</td>
<td>2004-2019</td>
<td>Theatre Technical Director</td>
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<td>Battcher, Shirley</td>
<td>1999-2011</td>
<td>Office Assistant II</td>
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<tr>
<td>Belk, James</td>
<td>1982-2004</td>
<td>Library/Learning Resources Assistant III</td>
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<td>Bennett, Judith</td>
<td>1991-2016</td>
<td>College Relations Specialist</td>
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<td>Biddys, Delores</td>
<td>1977-2015</td>
<td>Office Assistant III</td>
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<td>Bischel, Steve</td>
<td>1973-2007</td>
<td>Custodian</td>
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<td>Bogdanoff, Gerald</td>
<td>1980-2004</td>
<td>Electronics/Microcomputer Technician</td>
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<td>Bravo, Juan</td>
<td>1988-2014</td>
<td>Custodial Manager</td>
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<td>Brooks, Edward</td>
<td>1977-2010</td>
<td>Custodian</td>
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<td>Caldwell, Carmen</td>
<td>1979-2008</td>
<td>Department Secretary</td>
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<td>Carr, William</td>
<td>1999-2010</td>
<td>Financial Aid Assistant II</td>
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<td>Chernekofoff, Ellen</td>
<td>2002-2017</td>
<td>Early Childhood Education Associate</td>
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<td>Christiansen, Argilia</td>
<td>1977-2003</td>
<td>Textbook Purchasing Clerk</td>
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<td>Collins, Sheila</td>
<td>1993-2017</td>
<td>Early Childhood Education Specialist</td>
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<td>Cook David</td>
<td>2006-2018</td>
<td>Printing Trades Technician</td>
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<td>Cox, James</td>
<td>1992-2010</td>
<td>Athletic Equipment Manager</td>
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<td>Culbertson, Christine</td>
<td>1987-2014</td>
<td>Early Childhood Education Specialist</td>
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<td>Day, Charlezette</td>
<td>1989-2016</td>
<td>Job Developer</td>
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<td>Delaney, Theresa</td>
<td>1997-2017</td>
<td>Library Technical Services Assistant</td>
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<td>Dodd, Sherri</td>
<td>1990-2019</td>
<td>Accounting Technician</td>
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<td>Echols, Katherine</td>
<td>1970-2018</td>
<td>Student Services Specialist</td>
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<td>Ediger, Patricia</td>
<td>2006-2013</td>
<td>Department Secretary</td>
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<tr>
<td>Ediger, Stanley</td>
<td>2006-2014</td>
<td>Educational Advisor</td>
</tr>
<tr>
<td>Estrada, Ruthina</td>
<td>1987-2013</td>
<td>Administrative Aide</td>
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<tr>
<td>Faith, Linda</td>
<td>2001-2010</td>
<td>Department Secretary</td>
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<tr>
<td>Fischer, Judith</td>
<td>1992-2019</td>
<td>Bookstore Sales Associate</td>
</tr>
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<td>Flanders, Veronica</td>
<td>2007-2015</td>
<td>Department Secretary</td>
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<td>Flores, Delfina</td>
<td>1977-2007</td>
<td>Student Services Specialist</td>
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<td>Fouquette, Brenda</td>
<td>1988-2012</td>
<td>Library/Learning Resources Assistant II</td>
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<td>Garachana, Sandra</td>
<td>1982-2018</td>
<td>Administrative Aide</td>
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<td>Gerety, Cheryl</td>
<td>1990-2012</td>
<td>Office Assistant III</td>
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<tr>
<td>Greene, Jr., Homer</td>
<td>1991-2017</td>
<td>Educational Advisor</td>
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<td>Greenwood, Phyllis</td>
<td>1990-2010</td>
<td>Department Secretary</td>
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</tbody>
</table>
Guillen, Guillen  
2006-2011  
Custodian

Hagler, Linda  
1992-2008  
School Relations Specialist

Haney, Loretta  
1972-2018  
Assessment Coordinator

Harris, Elizabeth  
1980-2005  
Administrative Assistant

Harris, Linda  
1990-2015  
Textbook Purchasing Clerk

Harrison, Richard  
1990-2015  
Print, Media & Communications Manager

Hendricks, Debra  
2006-2014  
Administrative Aide

Jimenez, Jess  
1997-2004  
Athletic Equipment Manager

Johnson, Cathie  
1989-2015  
Financial Assistant I

Kilgore, Richard  
1992-2011  
Instructional Technician – Art

Kohl, Mona  
2001-2014  
Administrative Aide

Komaki, Hiro  
1975-2005  
Graphic Artist

Kroeker, Jay  
1970-2004  
Audio Visual Maintenance Specialist

Larsen, Dale  
2002-2007  
Financial Aid Assistant

La Voie, Charles  
1990-2013  
Micro-Computer Resource Technician

Lippmann, Frances  
1992-2015  
Admissions and Records Manager

Linn, Carolyn  
1991-2004  
Administrative Aide

Livengood, Robert  
1982-2005  
Instructional Technician-Automotive

Lopes, Susan  
2000-2016  
Office Assistant III

Lopez, Rosa  
1982-2017  
Evaluator

Mallory, Lynn  
1980-2016  
Administrative Assistant

Mangum, Pearl  
1990-2019  
Instructional Administrative Assistant

McCollum, Debra  
2002-2019  
Phone Communications Operator II

McSwain-Tennent, Holly  
1997-2005  
Administrative Aide

Mena, Salvador  
1973-2007  
Educational Advisor

Mendoza, Linda  
1993-2013  
Office Assistant III

Miller, Donna  
1985-2003  
Business Facilities Assistant

Miller, Toni O.  
1973-2004  
Educational Advisor

Moorer, Lewis  
1983-2008  
Lead Custodian

Murrietta, Leticia  
1974-2014  
Administrative Aide

Myers, Doris  
1988-2009  
Office Assistant III

Nelson, John  
1985-2017  
Athletic Trainer

Pelham-Wiley, Emma  
1987-2003  
Nursing Skills Resource Assistant

Peterson, Sandra  
2007-2012  
Department Secretary

Pinley, Lisa  
2000-2014  
Evaluator

Pisching, George  
1990-2008  
Graphic Artist

Points, Susan  
1987-2011  
Duplicating Operations Technician

Rackin, Marilyn  
1975-2007  
Secretary to the President

Ragasa, Erlinda  
2001-2016  
Accounting Technician I

Ramirez, Judith  
1992-2014  
Educational Advisor

Reid, Ora  
1985-2010  
Custodian

Rice, Mary  
1998-2012  
Student Services Specialist

Riegel, Rhea  
2001-2012  
Institutional Research Coordinator

Rivera, Donna  
1973-2009  
Assistant Bookstore Manager

Roe, Franklin  
1998-2010  
Job Development
Rogers, Phyllis  
2006-2016  
Office Assistant II

Rothford, Jim  
2003-2018  
Athletic Equipment Manager

Ruby, Michelle  
1990-2016  
Assessment Coordinator

Sanchez, Silvia  
1973-2019  
Office Specialist

Slevkoff, Hazel  
1970-2006  
Curriculum Assistant

Stovall, Deborah  
1995-2017  
Bookstore Sales Clerk III

Sullivan, Francis  
1975-2003  
Theatre Manager

Taylor, Gail  
1997-2011  
Administrative Aide

Supersad, Pearl  
1972-2011  
Department Secretary

Uribes, Regina  
1999-2011  
College Relations Specialist

Van Dyken, Robert  
2003-2014  
Custodian

Van Galder, Ann  
1996-2016  
Office Assistant III

Vargas, Sandra  
1973-2011  
Campus Business Assistant

Vennard, Michael  
1992-2005  
Instructional Technical-Reprographics

Wilk, Woody  
1985-2009  
News Writer/ Sports

Willingham, Tandy  
1982-2004  
Library/Learning Resources Assistant III

Willis, Carol  
1999-2004  
Office Assistant I

Whisenhunt, Lydia  
1969-2010  
Secretary to the President

Whittle, Oscar  
1987-2013  
Custodian
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