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 2022–23 Catalog may also be viewed online at: www.fresnocitycollege.edu under Academics.

Frequently Called Numbers
(Area Code 559)

Main Switchboard 442-8200
Admissions and Records 443-8604
Allied Health, Physical Education and Athletics Division Office 244-2604
Applied Technology Division Office 442-8273
Assessment Center 442-8280
Athletics Department 443-8503
Bookstore 442-8261
Business Division Office 442-8222
Business Office (fee payments) 489-2234
CalWORKs 442-8286
Career & Technology Center 265-5700
Career and Employment Center 442-8294
Child Development Center 443-8618
College Relations 442-8225
Counseling 442-8226
Disabled Students Programs & Services 442-8237
District Police 244-5911
Fine, Performing and Communication Arts Division Office 442-8260
Financial Aid 442-8245
Fire Academy 265-5700
Foundation 243-7500
Health Services (college nurse) 442-8268
Honors Program 442-8220
Humanities Division Office 442-8281
International Students 443-8256
Library, Circulation 442-8204
Library, Reference ext. 8764
Mathematics, Science and Engineering Division Office 442-8215
Police Academy 442-8277
Public Information Office 489-2218
Scholarship Information 442-8293
Social Sciences Division Office 442-8210
Student Activities 443-8688
Theatre Box Office 442-8221
Transfer Center 442-8290
Training Institute 243-7530
Transcripts 443-8659
Tutorial Center 442-8209
Veterans Resource Center 442-8224

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Fresno City College is California’s first community college and was founded in 1910 with 20 students and three instructors. The college now has over 20,000 students each semester and over 700 faculty members.

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 2022 semester and ends with the Summer 2023 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.

2021-2022 Fresno City College Catalog
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**2022-2023 Fresno City College Catalog**
Fresno City College strives to make students aware of the varied educational programs that are offered and to provide smooth access to these programs.

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Fresno City College provides students a rich and culturally diverse environment through student activities, club events and special heritage days and recognized months.

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2022-2023 Fresno City College Catalog
Fresno City College is a college of the State Center Community College District, which operates within the broader mission of California’s 116 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 access to equity-centered, quality, innovative educational programs and support services. Committed to a culture of anti-racism, we create dynamic communities of respect and inquiry which encourage student success and lifelong learning while fostering the sustainable economic, social, and cultural development of our students and region.

Fresno City College Vision Statement

Fresno City College aspires to build upon our equity-centered mission and further our commitment to normalize a culture of racial equity and anti-racism. As a community of educators and learners, we will use our individual and collective positions of influence, power, and privilege to foster a community of belonging, affirmation, and validation. We will courageously join as faculty, staff, and students in upholding our core values to transform lives in the Central Valley and beyond.

Fresno City College Core Values

Equity-Mindedness: We call attention to patterns of inequity in student outcomes and take personal and institutional responsibility for the success of our students. We critically reassess our own practices, are race-conscious, and aware of the social and historical context of exclusionary practices in American Higher Education.

Social Justice: We are focused on removing institutional barriers, taking responsibility for and mitigating systemic barriers. We are invested in validating our students’ lived experiences through examining qualitative and quantitative data which enhances our understanding of intersectionality. This builds a foundation of data-driven solutions and responses to systemic issues.

Sustainable Social and Economic Mobility: We commit to breaking extractive, exploitative, and racist systems and practices. Servimos y empoderamos (we serve and empower) marginalized and racially-minoritized individuals, communities, and histories. With invested community partners, we build programs which foster trans-generational economic growth and prosperity.
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-exploitative 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 1171 Fulton Street, Fresno, CA 93721. The district is comprised of Fresno City College, Reedley College, Career and Technology Center, Clovis Community College, Madera Community College, Madera Community College at Oakhurst, 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 2017, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were 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 2017 to Spring 2020. 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 2018 to Spring 2020, are transfer students.

- Completion Rate: 23.38%
- Transfer Rate: 5.26%

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 2022

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 8</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>September 5</td>
<td>Labor Day Holiday (Campus Closed)</td>
</tr>
<tr>
<td>October 7</td>
<td>Last day to drop from 18-week classes</td>
</tr>
<tr>
<td>November 11</td>
<td>Veterans Day Holiday (Campus Closed)</td>
</tr>
<tr>
<td>November 24-25</td>
<td>Thanksgiving Day Holidays (Campus Closed)</td>
</tr>
<tr>
<td>December 5-9</td>
<td>Final examinations</td>
</tr>
<tr>
<td>December 9</td>
<td>End of Fall Semester 2022</td>
</tr>
<tr>
<td>December 12-30</td>
<td>Winter recess</td>
</tr>
</tbody>
</table>

### Spring Semester 2023

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 9</td>
<td>Instruction begins</td>
</tr>
<tr>
<td>January 16</td>
<td>Martin Luther King, Jr. Day Holiday (Campus Closed)</td>
</tr>
<tr>
<td>February 17</td>
<td>Lincoln’s Day Holiday (Campus Closed)</td>
</tr>
<tr>
<td>February 20</td>
<td>Washington’s Day Holiday (Campus Closed)</td>
</tr>
<tr>
<td>March 10</td>
<td>Last day to drop from 18-week classes</td>
</tr>
<tr>
<td>April 3-7</td>
<td>Spring recess (Classes reconvene April 10)</td>
</tr>
<tr>
<td>May 15-19</td>
<td>Final examinations</td>
</tr>
<tr>
<td>May 19</td>
<td>End of Spring Semester 2023</td>
</tr>
<tr>
<td>May 19</td>
<td>Graduation exercises</td>
</tr>
</tbody>
</table>

### Summer Semester 2023

Fresno City College will conduct four sessions:

- 4-week summer session
- 6-week summer session
- 8-week summer session
- 10-week summer session

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 22</td>
<td>Instruction begins for 4- and 10-week classes</td>
</tr>
<tr>
<td>May 29</td>
<td>Memorial Day Holiday (Campus Closed)</td>
</tr>
<tr>
<td>June 5</td>
<td>Instruction begins for 8-week classes</td>
</tr>
<tr>
<td>June 16</td>
<td>Final examinations and end of 4-week classes</td>
</tr>
<tr>
<td>June 19</td>
<td>Instruction begins for 6-week classes</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Holiday (Campus Closed)</td>
</tr>
<tr>
<td>July 28</td>
<td>Final examinations; end of 6-week, 8-week, &amp; 10-week classes</td>
</tr>
</tbody>
</table>

*Note: Evening classes observe the same holiday and examination schedule as day classes.*
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 SCCCAD's colleges/centers. Apply online at www.fresnocitycollege.edu for greatest convenience.

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 SCCCAD 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 SCCCAD online admissions application.

High school students who wish to enroll in college courses before graduating high school, must complete a SCCCAD 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, or 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 SCCCAD 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. Information regarding the Dual Enrollment/Enrichment program can be obtained from your high school counselor or contact the College Relations office at (559) 442-8225 for details.

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 SCCCAD 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:

- June 1 for Fall admission
- November 1 for Spring admission

International students admitted must comply with the regulations of the Student and Exchange Visitor Program (SEVP) and maintain 12 qualifying units or more each semester at this 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 college district. Current admission application forms and procedures, and relevant health and TB requirements are available on the 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 International Student Program. By the student's 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.
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 the 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:

1. Complete a SCCCD Admission Application prior to the deadline as specified in the catalog, if applicable.
2. 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.
3. Request each college of attendance to send a complete official transcript of work attempted whether or not credit was earned.
4. 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. (Title 5, Section 54200).
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 their 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 their 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
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
- 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

Steps to Success

1. APPLICATION/ADMISSION
   Apply online at www.scccd.edu/apply

2. FINANCIAL AID (optional)
   Apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA) at www.studentaid.gov/ffas. To apply for scholarships, view important deadlines, and find more information, go to www.fresnocitycollege.edu/financialaid.

3. ORIENTATION
   Complete the online orientation at www.scccd.edu/orientation

4. COUNSELING/ASSESSMENT
   Meet with a FCC counselor and complete your first semester Student Education Plan (SEP).

5. REGISTRATION
   Register for classes at www.scccd.edu/register

Matriculation Exemptions
Fresno City College encourages all students to fully participate in the college’s matriculation services. However, certain students may be exempt from the assessment, orientation and/or counseling components.

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 College Relations Office at (559) 442-8225 (new students) or the Counseling Center at (559) 442-8226 (current or returning students), or online counseling is also available via the Fresno City College website at www.fresnocitycollege.edu.

Assessment & AB705
In alignment with AB705/AB1805, Fresno City College ensure our students’ right to access transfer level coursework in English and Math. FCC utilizes a process that includes multiple measure criteria for initial course placement.

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.

Multiple Measures Placement Criteria
Criteria that may be used to place students into courses may include:

- High school coursework
- High school grades
- High school grade point average
- AP/IB Exam Scores
- College coursework completed at another college/university
- Guided Self Placement

Based on a review of these multiple measures, students may be eligible to enroll in transfer level English or math courses, with or without co-requisite support.

Challenge Process
Any student whose multiple measure placement places them into a corequisite support course for English and/or math may challenge that placement by seeing a counselor and completing the appropriate challenge form.
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>
</table>
| 1    | Active Military/Veterans, CalWORKs, Disabled Student Programs and Services (DSPS), Foster Youth, Extended Opportunity Programs and Services (EOPS), verified homeless, Tribal TANF, and Central Valley Promise (CVP)* | • Fully Matriculate - CVP: fully matriculated by published deadline  
• Good Academic Standing (not req. for Foster Youth or homeless)  
• Do not Exceed 90 SCCCD degree applicable units |
| 2    | District approved groups based upon AR 5055: ASG, Athletics, DSPS Notetakers, Future Nurses, Honors, Middle College High Schools, ROTC, TRIO, Student Ambassadors | • Good Academic Standing  
• Continuing students must have an SEP by published deadline  
• Do not exceed 90 SCCCD degree applicable units  
• First-time college students MUST be fully matriculated |
| 3    | Continuing students who have completed a Student Education Plan (SEP)* Based upon Quality Points | • Good Academic Standing  
• Continuing students must have an SEP by published deadline  
• Do not exceed 90 SCCCD degree applicable units  
• First-time college students MUST be fully matriculated |
| 4a   | First-time college students – from SCCCD feeder High Schools | • Fully Matriculated by published deadline |
| 4c   | First-time college students – Home Schooled within the SCCCD service area | • Fully Matriculated by published deadline |
| 4b   | First-time college students – from non-feeder high schools | • Fully Matriculated by published deadline |
| 5    | Continuing students without a Student Education Plan (SEP). Based upon Quality Points | • Good Academic Standing  
• Do not exceed 90 SCCCD degree applicable units |
| 6a   | First-time college students who are not fully matriculated, College Advancement Program | N/A |
| 6b   | Returning students with a Student Education Plan (SEP) | • SEP on file by published deadline  
Good Academic Standing  
• Do not exceed 90 SCCCD degree applicable units |
| 6c   | Returning students without a Student Education Plan and transfer students | • Good Academic Standing  
• Do not exceed 90 SCCCD degree applicable units |
| 7    | All not meeting criteria above may register during any open enrollment. | • Not good  
• Over 90 SCCCD degree applicable units  
• High School Enrichment |
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, Madera Community College, or Madera Community College at Oakhurst) 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 they no longer wish 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 using WebAdvisor 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.
Excessive “Ws” will be used as a 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 register for classes.
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
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

NOTE: Enrollment fees for California residents are subject to change without notice per California State Legislature and Governor. If enrollment fees are raised after you enroll, you will be notified of the additional amount that you need to pay.

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):

Regular and Summer Sessions
Each full unit taken:
- International Student Tuition $315**
- Nonresident Student Tuition $315**
- Plus enrollment Fee per unit $46**

** 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. Nonresident fees are payable via wire transfer, 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 course have a continuing value to the student outside of the classroom setting.

**Health Fee**

The health fee provides students with a variety of health care services. In accordance with Board policy, students are required to pay a health fee, regardless of the units taken.

For on-campus students, a $21 health fee is required for each semester (fall and spring terms) and a $18 health fee for the summer session. Off-campus students are required to pay a $13 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. (E.C. 76355)

This fee is not waived by the California College Promise Fee Waiver. The use of on-campus labs or the on-campus tutorial center will result in an on-campus health fee. In accordance with California Education Code Section 76355, an exemption/waiver from the health fee is available to the following students:

- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization.
- Students who are attending a community college under an approved apprenticeship training program.

The Health Fee Waiver form is available at the Fresno City College Business Office and online. The form must be turned in prior to the start of each semester.

**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. Copies of campus parking regulations are available at the campus Police Department or on their website at sc-cdpolice.com. Students requiring handicap parking should contact the Disabled Students Programs and Services Office.

**Transcript Fee**

Requests for transcripts of courses taken within the State Center Community College District must, by provision of State and Federal law, be accompanied by student authorization. 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.

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 or forwarded.

**Associated Student Government Fee**

Students are encouraged to purchase an Associated Student Body (ASB) membership. The membership is $5 per semester. The ASB card entitles the student to participate in or attend all activities sponsored by the ASB. The card can also be used for reduced admission to all college-sanctioned athletic home games (except playoffs), theatrical productions and music programs. Students who are ASB members and carry 9 units or more are eligible for Associated Student funded emergency book loans and scholarships as available. A FAX/Q bus pass is included with the purchase of the ASB card. The college reserves the right to revoke this option for any person who is found misusing the pass.

**Associated Student Government Representation Fee**

A student representative fee of $2.00 is charged each semester, excluding summer sessions, to all students taking classes at Reedley College, Fresno City College, Clovis Community College, and Madera Community College, including the community campus locations. The fee is charged at each location a student attends, so students attending all four locations would be charged a total of $8.00. The California
College Promise Grant will not waive this fee. This fee is used for student advocacy at the local, state, and national levels. The fee is mandatory; however, students may opt out of the fee when registering for classes.

Credit by Examination Fee*

Application for Credit by Examination (CBE) is available in the Admissions Office located in the Student Services Building. If the application for the credit by exam is approved, the student must pay the credit by exam fees to the Business Office, no later than the end of the ninth week of the semester. Fees are the State per unit fee required by State Law (E.C. 76300.5, CCR 58753), which is currently $46 per unit (i.e., credit by exam for a 4.0 unit class would be $46 per unit enrollment fee* for a total of $184. If California residency has not been established, non-resident tuition fees will also be added). Students awarded the California Promise Fee Waiver are entitled to have the fees waived and paid by the waiver. Loss of the California Promise Fee Waiver after fees are waived would result in the student becoming responsible for the CBE fees. The receipt for payment must be presented to the instructor before the exam will be administered.

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 [http://www.fresnocitycollege.edu/admissions-aid/business-office/fee-reversals-and-refunds.html](http://www.fresnocitycollege.edu/admissions-aid/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.

- A 100% refund is given upon withdrawal by the 10 percent point.
- No refund is given after withdrawal beyond the 10 percent point.

<table>
<thead>
<tr>
<th>NUMBER OF ACTUAL CLASS MEETINGS:</th>
<th>10% POINT (ROUNDED DOWN)</th>
<th>100% REFUND IF WITHDRAWAL IS ON OR BEFORE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>0.8 = 0</td>
<td>1st day of class</td>
</tr>
<tr>
<td>16</td>
<td>1.6 = 1</td>
<td>1st day of class</td>
</tr>
<tr>
<td>24</td>
<td>2.4 = 2</td>
<td>2nd day of class</td>
</tr>
<tr>
<td>38</td>
<td>3.8 = 3</td>
<td>3rd day of class</td>
</tr>
</tbody>
</table>

*Do not count holidays, weekends, or any other day the class is not scheduled to meet.

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.
ACADEMIC REGULATIONS

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 may be 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

Online courses and programs provide opportunities for students to pursue their educational goals in a flexible format. Online courses are offered both asynchronous and in real-time, while partially online/hybrid courses require one or more scheduled class meetings in person. All credit courses meet the requirements and standards established by the college. Online courses are rigorous. Students can find strategies and guidance in the Student Support Hub in Canvas, FCC’s learning management system. Consistent access to a computing device and the internet are necessary for success. Several applications do not operate on a mobile device or Chromebook. Students need to check each course section they are considering for enrollment. Virtual student services are available to all students. Students must be physically present in California to be eligible for online classes. You can visit the Distance Education webpage for frequently asked questions at https://www.fresnocitycollege.edu/academics/online-learning/support.html.
Attendance

Students may 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, and Writing. 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:

<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>

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.

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.

P/NP, Pass/No Pass

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 the 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](http://onlineforms.scccd.edu/passnopass.aspx), no later than the end of the fifth week of a full-term course 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.

See the Admissions and Records office for deadlines for selecting (or reversing) the **Pass/No Pass** grading option.

### 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.

### 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, N, Y, 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 and 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. Please meet with a counselor at Fresno City College to discuss the course-to-course equivalency process.

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:

<table>
<thead>
<tr>
<th>AP Examination/Subject Area</th>
<th>Minimum Score</th>
<th>Fresno City College</th>
<th>Fresno City College</th>
<th>CSU GE Area</th>
<th>CSU GE + IGETC Area</th>
<th>GE Area (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART: ART HISTORY</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>ART 5 &amp; ART 6 (6)</td>
<td>C1 or C2 (3)</td>
<td>6</td>
<td>3A or 3B (3)</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>3</td>
<td>A: Natural Sciences (4)</td>
<td>BIOL 3 (4)</td>
<td>B2 &amp; B3 (4)</td>
<td>6</td>
<td>5B &amp; 5C (4)</td>
</tr>
<tr>
<td>CALCULUS AB</td>
<td>3</td>
<td>D2: Language &amp; Rationality – Analytical Thinking Mathematics (5)</td>
<td>MATH 5A (5)</td>
<td>B4 (3)</td>
<td>3</td>
<td>2A (3)</td>
</tr>
<tr>
<td>CALCULUS BC</td>
<td>3</td>
<td>D2: Language &amp; Rationality – Analytical Thinking Mathematics (5)</td>
<td>MATH 5B (4)</td>
<td>B4 (3)</td>
<td>6</td>
<td>2A (3)</td>
</tr>
<tr>
<td>CALCULUS BC/AB Subscore</td>
<td>3</td>
<td>D2: Language &amp; Rationality – Analytical Thinking Mathematics (5)</td>
<td>MATH 5A (5)</td>
<td>B4 (3)</td>
<td>3</td>
<td>2A (3)</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>3</td>
<td>A: Natural Sciences (3)</td>
<td>CHEM 3A (4)</td>
<td>B1 &amp; B3 (4)</td>
<td>6</td>
<td>5A &amp; 5C (4)</td>
</tr>
<tr>
<td>CHINESE LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>CHIN 1 (5)</td>
<td>C2 (3)</td>
<td>6</td>
<td>3B &amp; 6 (3)</td>
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<tr>
<td>COMPARATIVE GOVERNMENT AND POLITICS</td>
<td>3</td>
<td>B: Social &amp; Behavioral Sciences (3)</td>
<td>POLSCI 5 (3)</td>
<td>D (3)</td>
<td>3</td>
<td>4 (3)</td>
</tr>
<tr>
<td>COMPUTER SCIENCE A</td>
<td>3</td>
<td>Elective (3)</td>
<td>CSCI 40 (4)</td>
<td>N/A</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>COMPUTER SCIENCE PRINCIPLES</td>
<td>3</td>
<td>Elective (3)</td>
<td>N/A</td>
<td>N/A</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ECONOMICS: MACROECONOMICS</td>
<td>3</td>
<td>B: Social &amp; Behavioral Sciences (3)</td>
<td>ECON 50 (3)</td>
<td>D (3)</td>
<td>3</td>
<td>4 (3)</td>
</tr>
<tr>
<td>ECONOMICS: MICROECONOMICS</td>
<td>3</td>
<td>B: Social &amp; Behavioral Sciences (3)</td>
<td>ECON 40 (3)</td>
<td>D (3)</td>
<td>3</td>
<td>4 (3)</td>
</tr>
<tr>
<td>ENGLISH LANGUAGE/COMPOSITION</td>
<td>3</td>
<td>D1: Language &amp; Rationality - Composition (4)</td>
<td>ENGL 1A (4)</td>
<td>A2 (3)</td>
<td>6</td>
<td>1A (3)</td>
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<tr>
<td>ENGLISH LITERATURE/COMPOSITION</td>
<td>3</td>
<td>C: Humanities (3) &amp; D1: Language and Rationality - Composition (3)</td>
<td>ENGL 1A &amp; ENGL 1B (7)</td>
<td>A2 &amp; C2 (6)</td>
<td>6</td>
<td>1A or 3B (3)</td>
</tr>
<tr>
<td>AP Examination/Subject Area</td>
<td>Minimum Score</td>
<td>Fresno City College GE Area</td>
<td>Fresno City College Courses (units)</td>
<td>CSU GE Area GE + Elective</td>
<td>IGETC Area GE Area (units)</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
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<td>---------------------------</td>
<td>---------------------------</td>
<td></td>
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<tr>
<td>ENVIRONMENTAL SCIENCE</td>
<td>3</td>
<td>A: Natural Sciences (3)</td>
<td>GEOL 12 (3) NO LAB</td>
<td>B1 &amp; B3 (4)</td>
<td>4</td>
<td>5A &amp; 5C (3)</td>
</tr>
<tr>
<td>FRENCH LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>FRENCH 3 (5)</td>
<td>C2 (3)</td>
<td>6</td>
<td>3B &amp; 6 (3)</td>
</tr>
<tr>
<td>GERMAN LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>N/A</td>
<td>C2 (3)</td>
<td>6</td>
<td>3B &amp; 6 (3)</td>
</tr>
<tr>
<td>HISTORY, EUROPEAN</td>
<td>3</td>
<td>B: Social &amp; Behavioral Sciences OR C: Humanities (3)</td>
<td>HIST 2 (3)</td>
<td>C2 or D (3)</td>
<td>6</td>
<td>3B or 4 (3)</td>
</tr>
<tr>
<td>HISTORY, U.S.</td>
<td>3</td>
<td>B: Social &amp; Behavioral Sciences (3)</td>
<td>HIST 11 &amp; HIST 12 (6)</td>
<td>C2 or D &amp; U.S.-1 (3)</td>
<td>6</td>
<td>3B or 4 &amp; US-1 (3)</td>
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<tr>
<td>HISTORY, WORLD HISTORY MODERN</td>
<td>3</td>
<td>B: Social &amp; Behavioral Sciences (3)</td>
<td>HIST 23 (3)</td>
<td>C2 or D (3)</td>
<td>3</td>
<td>3B or 4 (3)</td>
</tr>
<tr>
<td>HUMAN GEOGRAPHY</td>
<td>3</td>
<td>B: Social &amp; Behavioral Sciences (3)</td>
<td>N/A</td>
<td>D (3)</td>
<td>3</td>
<td>4 (3)</td>
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<tr>
<td>ITALIAN LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>N/A</td>
<td>C2 (3)</td>
<td>6</td>
<td>3B &amp; 6 (3)</td>
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<tr>
<td>JAPANESE LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>N/A</td>
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<td>3B &amp; 6 (3)</td>
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<tr>
<td>LATIN</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>N/A</td>
<td>C2 (3)</td>
<td>6</td>
<td>3B &amp; 6 (3)</td>
</tr>
<tr>
<td>MUSIC THEORY</td>
<td>3</td>
<td>Elective (3)</td>
<td>N/A</td>
<td>N/A</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>PHYSICS 1</td>
<td>3</td>
<td>A: Natural Sciences (3)</td>
<td>N/A</td>
<td>B1 &amp; B3 (4)</td>
<td>4</td>
<td>5A &amp; 5C (4)</td>
</tr>
<tr>
<td>PHYSICS 2</td>
<td>3</td>
<td>A: Natural Sciences (3)</td>
<td>N/A</td>
<td>B1 &amp; B3 (4)</td>
<td>4</td>
<td>5A &amp; 5C (4)</td>
</tr>
<tr>
<td>PHYSICS 1 &amp; 2</td>
<td>3</td>
<td>A: Natural Sciences (3)</td>
<td>PHYS 2A (4)</td>
<td>B1 &amp; B3 (4)</td>
<td>4</td>
<td>5A &amp; 5C (4)</td>
</tr>
<tr>
<td>PHYSICS C MECHANICS</td>
<td>3</td>
<td>A: Natural Sciences (3)</td>
<td>N/A</td>
<td>B1 &amp; B3 (4)</td>
<td>4</td>
<td>5A &amp; 5C (3)</td>
</tr>
<tr>
<td>PHYSICS C ELECTRICITY/ MAGNETISM</td>
<td>3</td>
<td>A: Natural Sciences (3)</td>
<td>N/A</td>
<td>B1 &amp; B3 (4)</td>
<td>4</td>
<td>5A &amp; 5C (3)</td>
</tr>
<tr>
<td>PSYCHOLOGY</td>
<td>3</td>
<td>E2: Lifetime Wellness - Lifetime Skills (3)</td>
<td>PSY 2 (3)</td>
<td>D (3)</td>
<td>3</td>
<td>4 (3)</td>
</tr>
<tr>
<td>SPANISH LANGUAGE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>SPAN 3 &amp; SPAN 4 (10)</td>
<td>C2 (3)</td>
<td>6</td>
<td>3B &amp; 6 (3)</td>
</tr>
<tr>
<td>SPANISH LITERATURE and CULTURE</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>SPAN 5 &amp; SPAN 6 (8)</td>
<td>C2 (3)</td>
<td>6</td>
<td>3B &amp; 6 (3)</td>
</tr>
<tr>
<td>STATISTICS</td>
<td>3</td>
<td>D2: Language &amp; Rationality – Analytical Thinking Mathematics (3)</td>
<td>MATH 11 OR MATH 42 (4)</td>
<td>B4 (3)</td>
<td>3</td>
<td>2A (3)</td>
</tr>
<tr>
<td>AP Examination/ Subject Area</td>
<td>Minimum Score</td>
<td>Fresno City College GE Area</td>
<td>Fresno City College Courses (units)</td>
<td>CSU GE Area GE Area (units)</td>
<td>CSU GE GE + Elective</td>
<td>IGETC Area GE Area (units)</td>
</tr>
<tr>
<td>-----------------------------</td>
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</tr>
<tr>
<td>STUDIO ART – 2D DESIGN</td>
<td>3</td>
<td>Elective (3)</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>STUDIO ART – 3D DESIGN</td>
<td>3</td>
<td>Elective (3)</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>STUDIO ART – DRAWING</td>
<td>3</td>
<td>C: Humanities (3)</td>
<td>N/A</td>
<td>N/A</td>
<td>3</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*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.

**A petition to apply for college credit for Political Science 2 at Fresno City College must be submitted to Admissions and Records. Students must successfully submit the following documents to Admissions and Records for 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 U.S. Government and Politics does meet the U.S. Constitution requirement for teaching credential candidates (CA Ed. Code Sec. 44322). However, it does NOT satisfy the requirements of Political Science 2 because it does not address California state and local government requirements (Title 5 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.
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.

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. Please meet with a counselor at Fresno City College to discuss the course-to-course equivalency process.

<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>
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<tr>
<td>Business Law</td>
<td>50</td>
<td>BA 18</td>
<td>4</td>
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<tr>
<td>Intro to Business</td>
<td>50</td>
<td>BA 10</td>
<td>3</td>
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<tr>
<td>Computer Concepts</td>
<td>50</td>
<td>CIT 15</td>
<td>3</td>
</tr>
<tr>
<td>Eng Comp (General) (1978 through April 1986)</td>
<td>500</td>
<td>ENGL 125</td>
<td>4</td>
</tr>
<tr>
<td>Eng Comp (General) (after May 1986 or before 1978)</td>
<td>390</td>
<td>ENGL 125</td>
<td>4</td>
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<tr>
<td>Eng Comp w/ Essay</td>
<td>*600</td>
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<tr>
<td>English Literature</td>
<td>50</td>
<td>ENGL 46A &amp; 46B</td>
<td>6</td>
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<td>Humanities (General)</td>
<td>500</td>
<td>ENGL 45 &amp; ART 6</td>
<td>6</td>
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<tr>
<td>American Literature</td>
<td>50</td>
<td>ENGL 48A &amp; B</td>
<td>6</td>
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<tr>
<td>College Composition</td>
<td>50</td>
<td>ENGL 1A</td>
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Business Division

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<thead>
<tr>
<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
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| Math, Science and Engineering Division

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<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
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<tbody>
<tr>
<td>Trigonometry</td>
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<td>MATH 4A</td>
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<tr>
<td>Microbiology</td>
<td>50</td>
<td>BIOL 31</td>
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<tr>
<td>Natural Sciences (Gen)</td>
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### Social Sciences Division

<table>
<thead>
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<th>EXAM TITLE</th>
<th>MINIMUM SCORE</th>
<th>EQUIVALENT FCC COURSE</th>
<th>UNITS GRANTED</th>
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<tr>
<td>Afro-American History</td>
<td>50</td>
<td>AFRAM 1</td>
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<td>American Government **</td>
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<tr>
<td>American History I</td>
<td>50</td>
<td>HIST 11</td>
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<tr>
<td>American History II</td>
<td>50</td>
<td>HIST 12</td>
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<td>Macroeconomics, Intro</td>
<td>50</td>
<td>ECON 50</td>
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<td>Sociology</td>
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<td>Psychology, General</td>
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<td>PSY 2</td>
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<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>HIST 1</td>
<td>3</td>
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<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>HIST 2</td>
<td>3</td>
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<tr>
<td>Soc Sci &amp; Hist (Gen.)</td>
<td>500</td>
<td>Soc Sci</td>
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* Meets California State Teacher Certification (Proficiency) requirements.

** Satisfies U.S. Constitution requirements for State Certification (CA Ed. Code Sec. 44322; not for Title 5 Sec. 40404).

### Fine, Performing, and Communication Arts Division

### 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>Theatre HL</td>
<td>4</td>
<td>Theatre Arts 30 &amp; 41</td>
<td>6</td>
</tr>
<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>
</tr>
</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.

### 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. Please meet with a counselor at Fresno City College to discuss the course-to-course equivalency process.
<table>
<thead>
<tr>
<th>Course</th>
<th>CSU GE AREA: MINIMUM SCORE</th>
<th>CSU GE AREA: GE AREA (UNITS)</th>
<th>IGETC AREA: MINIMUM SCORE</th>
<th>IGETC AREA: GE AREA (UNITS)</th>
</tr>
</thead>
<tbody>
<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></td>
<td></td>
<td>5</td>
<td>3B and 6A (3)</td>
</tr>
<tr>
<td>IB Language A Language and Literature HL (any language, except English)</td>
<td></td>
<td>5</td>
<td>3B and 6A (3)</td>
<td></td>
</tr>
<tr>
<td>IB Language A 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) F13*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IB Language A2 (any language) HL</td>
<td>4</td>
<td>C2 (3) F13*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IB Language B (any language) HL</td>
<td>4</td>
<td>n/a</td>
<td>5</td>
<td>6A (3)</td>
</tr>
<tr>
<td>IB Mathematics HL</td>
<td>4</td>
<td>B4 (3)</td>
<td>5</td>
<td>2A (3)</td>
</tr>
<tr>
<td>IB Physics HL</td>
<td>5</td>
<td>B1 (3)</td>
<td>5</td>
<td>5A (3)</td>
</tr>
<tr>
<td>IB Psychology HL</td>
<td>5</td>
<td>D (3)</td>
<td>5</td>
<td>4 (3)</td>
</tr>
<tr>
<td>IB Theatre HL</td>
<td>4</td>
<td>C1 (3)</td>
<td>5</td>
<td>3A (3)</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 of 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/Health

**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.

**Credit for Prior Learning (CPL)**

Credit for prior learning is college credit awarded for validated college-level skills and knowledge gained outside of a college classroom.

This CPL definition does not include knowledge and skills already assessed and awarded credit through formal education at regionally accredited in-state and out-of-state institutions.

**Credit for Prior Learning Categories**

Students may demonstrate proficiency in a course eligible for CPL and receive college credit through the approved alternative methods for awarding credit listed below. All options may not apply for every course. The faculty determine which method, if any, is appropriate for a specific course.

- Advanced Placement (AP) Examination
- International Baccalaureate (IB)
- College Level Examination Program (CLEP)
- Military Transcripts (may include Joint Services Transcript (JST), Sailor/Marine American Council on Education Registry Transcript (SMART), Army and American Council on Education Registry Transcript Service (AARTS), Community College of the Air Force (CCAF), Coast Guard Institute (CGI), DANTES/USAFI, Defense Language Institute Foreign Language Transcripts (DLIFLC), Defense Manpower Data Center (DMDC), DLPT Examinee Results, DA Form 330 Language Proficiency Questionnaire, or verified copies of DD214 or DD295 military records.)
- Examination administered by other agencies
- Industry-recognized credential documentation
- Student-created portfolios
- Credit by examination

**CPL Assessment Methods**

Qualified discipline faculty shall determine the CPL assessment that is appropriate for the student based on their experiences, and credit will be determined by qualified faculty who conduct the CPL assessment.

**Examination:** Credit by examination is a process whereby discipline faculty administer a locally-developed exam to determine whether a student can demonstrate sufficient mastery of the learning outcomes of that course. The college may charge a fee per unit.

**Assessment:** This type of assessment can include a student developing a portfolio or completing a skills demonstration that is evaluated by faculty. This can also include faculty evaluating a Joint Services Transcript, or developing a “cross-walk” in which they assess the competencies a student achieved in a prior learning experience and determine whether they match the student learning outcomes of a designated course. College faculty can consult credit recommendations made by the American Council on Education (ACE) in assessing prior learning experiences. Once a faculty member has assessed a standard/common training, the credit recommendation can be made available for other faculty to consider for other students with identical credentials to prevent duplication of assessment and encourage consistency in credit for identical experiences. Students cannot be charged a fee for these types of assessments (this includes standardized tests, such as Advanced Placement (AP), International Baccalaureate (IB), CLEP, Defense Language Proficiency Test, and others).
Credit for Prior Learning Process
Step 1 - In consultation with a counselor, the student determines that they are eligible for CPL through an intake process.
Step 2 - Student is referred to discipline faculty.
Step 3 - Discipline faculty conduct the appropriate assessment.

Eligibility for CPL
• Current students must have an education plan on file.
• The course for which the student is seeking credit is listed in the current college catalog.
• The student is not currently enrolled in the course to be challenged past census date.
• Credit by Examination:
  o The student is registered in the District and not currently enrolled in nor received credit for a more advanced course in the same subject (may be waived by department).
  o The student must be in good academic standing with the District.
  o The course can only be challenged once, unless the College Vice President of Instruction determines that there are extenuating circumstances that justify a subsequent retake. Credits acquired by prior learning are not applicable to meeting such unit load requirements as Selective Service deferment, Veterans, or Social Security benefits. Credit acquired by prior earning shall not be counted in determining the 12 semester hours of credit in residence required for an associate degree.

Transcript
The student's academic record shall be clearly annotated to reflect that credit was earned by an assessment for prior learning in lieu of a specific course.

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 their 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 their 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 their 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 they are enrolled in (consult with Admissions & Records for certain exceptions that may apply).
  4. The student's instructor(s) may 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. 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.

Per AR 4225, “extenuating circumstances” are taken to mean verified cases of accidents, illness, or other circumstances beyond the control of the student.

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 petitioning (2nd attempt).
- Students must meet with an academic counselor to repeat a course for which two substandard grades or marks (3rd attempt) have been earned.
- Students must petition to the Academic Standards Committee to repeat a course for which three or more substandard grades or marks (4th attempt or greater) 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.

- To petition to repeat a course for a third attempt, Fresno City College students are required to meet with a counselor for review.
- To petition 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 comprehensive student education plan (C-SEP) and provide statements as to:
  1. Why the student has been unable to complete the course work successfully; supporting documentation may be provided as well.
  2. Why the student will be able to be successful in college in the future. What will be different now and in the future?

If the petition is approved by the Academic Standards Committee, students will only be able to register for the course starting with the first day of class and 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 through the Admissions and Records office.
Reasons for such repetition include but are not limited to:

- significant lapse in time (no less than 36 months since the grade was obtained)
- significant change in industry or licensure standards
- the course is legally mandated for employment or licensure
- the previous grade was due, at least in part, to the result of verified extenuating circumstances beyond the student's control
- course repetition is required as a special academic accommodation for a qualified Disabled Students Programs and Services student

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, with the exception for repetitions for legally mandated training.

**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.

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>
<tr>
<td>PHYSICAL EDUCATION</td>
<td>Aerobics, Archery, Badminton, Basketball, Cardio Interval Training, Circuit Training, Conditioning, Fitness &amp; Health, Golf, Self Defense, Swimming, Tennis, Volleyball, Weight Training, Yoga</td>
</tr>
<tr>
<td>THEATRE ARTS</td>
<td>Acting, Competition/Conference, Performance Practicum, Technical Practicum</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 32). 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 (associate degree or certificate 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.

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 be subject to unit restrictions and will need special approval of a counselor for registration.
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 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 below 2.0.
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 under Academic Profile.

Certifications of Enrollment

Certifications of enrollment shall be requested in writing at https://onlineforms.scccd.edu/regforverification.aspx. A minimum of five working days for the preparation of certifications is required.

The following definitions are used by the 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>DEFINITION</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 emailing honors@fresnocitycollege.edu.

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 ensure 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>DEPARTMENT</th>
<th>ACCOUTERMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American Graduation</td>
<td>Sash</td>
</tr>
<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>
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<tr>
<td>High Honors</td>
<td>Gold Tassel</td>
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<tr>
<td>Latino Graduation</td>
<td>Sash</td>
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<tr>
<td>Leon S Peters Honors Program</td>
<td>Stoll</td>
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<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 by emailing honors@fresnocitycollege.edu.

*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 by emailing honors@fresnocitycollege.edu.

*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" in each required course. These certificates will not appear on a student's transcript.

Certificate of Achievement
A certificate of achievement shall be awarded to students who successfully complete a specified curriculum (minimum of 8 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.

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

See page 90 for a list of certificates of completion.

Certificate of Competency
A certificate of competency may be awarded after meeting the designated competencies in non-credit courses within a prescribed pathway. See page 90 for a list of certificates of competency.

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 265, 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, per Title 5, section 55063(b):

**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
Effective with the fall 2017 semester, a student may earn more than one AA and/or AS degree from Fresno City College. A student may declare and pursue more than one degree simultaneously. The same AA and/or AS degree cannot be awarded from 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 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://www.icangotocollege.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
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 minimum of twelve (12) degree applicable units satisfactorily completed in residence at Fresno City College.
3. At least eighteen (18) units in a single discipline or related disciplines (major) or in an approved area of emphasis. Each course applied to this major requirement must be completed with a grade of "C" or better or a "P."
4. Competence in reading and 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.) Only one reading or writing course at one level below English 1A may be applied to degree requirements.
5. Competence in mathematics, demonstrated by completion with a grade of 2.0, "C" or better in one of the following classes: Mathematics 3A, 4A, 4B, 5A, 5B, 6, 7, 10A, 10B, 11, 11H, 17, 21, 26, 42, 45, 102, or 103. (Satisfactory completion of a mathematics course at the level of Intermediate Algebra shall satisfy both the competency requirement and the coursework requirement set forth in Title 5, subdivision (b)(1)(D)(ii) of this section.)
6. Students must complete at least eighteen (18) units in general education coursework from one of the three following general education patterns:
   Option 1 – Fresno City College General Education - for students not intending to transfer to a four-year institution. Cannot be used for an Associate Degree for Transfer.
   Option 2 – CSU GE – California State University General Education - for students intending to transfer to the CSU or other four-year institution, with the exception of University of California. Option 3 – IGETC – Intersegmental General Education Transfer Curriculum – for students intending to transfer to a UC, CSU or other four-year institution. See a counselor for advisement on appropriate GE pattern.
Fresno City College General Education for the Associate Degree:

A minimum of 18 semester units in general education is required for graduation from Fresno City College.

Select courses from the following areas: A. Natural Sciences (3 units); B. Social and Behavioral Sciences (3 units); C. Humanities (3 units); D. Language and Rationality (minimum 6 units, one course each from D.1 = 3 units and D.2 = 3 units [or D.3 if mathematics competency has been met with a demonstration of satisfactory completion]); E. Lifetime Wellness (minimum 5 units, with at least one course from each E.1 and E.2); F. Government and American Institutions (3 units); G. Communication (3 units). Coursework used to fulfill General Education may also be used to fulfill specific course and unit requirements of individual majors.

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

B. Social and Behavioral Sciences (3 units)
- African-American Studies 1, 2, 4, 5, 6, 34, 41
- American Indian Studies 31, 32, 34
- American Studies 11
- Anthropology 1, 2/2H, 3, 4, 12, 28
- Asian-American Studies 1, 8, 10, 15, 25
- Business Administration 20
- Chicano-Latino Studies 11, 12A, 12B, 13, 14, 24, 28, 29, 30, 33
- Child Development 5, 39
- Criminology 5
- Economics 25, 40/40H, 50/50H
- Ethnic Studies 10
- Geography 2, 4A, 4B, 20
- Global Studies 1, 2
- History 1, 2, 3, 11, 12/12H, 15, 17, 18, 20, 21, 22, 25, 29, 30, 34
- Human Services 10, 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, 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, 40, 50, 52, 55, 70
- Asian American 8, 55
- Chicano-Latino Studies 17A, 18, 20, 21, 27B
- Chinese 1, 2
- Communication 12
- 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, 11, 42
- Japanese 1, 2
- Journalism 1, 16
- Linguistics 10/10H, 11
- Music 3, 3P, 5, 12, 13, 15, 16, 17, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 34, 35, 40, 41, 42A, 42B, 42C, 42D, 46, 92
- Philosophy 1A/1AH, 1B, 1C/1CH, 3A, 3B
- Photography 5, 6, 15, 17, 18, 32
- Portuguese 1, 2
- Spanish 1, 2, 2NS, 3, 3NS, 4, 4NS, 5, 6, 7, 41, 42
- Women's Studies 36

D. Language and Rationality
(6 units: one course each from D.1 = 3 units and D.2 = 3 units [or D.3 if mathematics competency has been met with a demonstration of satisfactory completion])

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. Analytical Thinking: Mathematics
- Decision Science 21, 23
- Mathematics 3A, 4A, 4B, 5A, 5B, 6, 7, 10A, 10B, 11/11H, 17, 21, 26, 42, 45, 102, 103, or any advanced math class
- Psychology 42
3. Analytical Thinking
   Applied Technology 10
   Business Administration 10, 18, 30, 33
   Communication 25
   Computer Information Technology 60, 63, 65, 66, 69
   Computer Science 40, 41
   Criminology 13
   Electrical Systems Technology 51
   English 3/3H
   Graphic Communications 15, 17, 20A, 20B, 22, 23, 30, 41, 51
   Marketing 10
   Philosophy 2/2H, 6
   Political Science 13
   Sociology 18

E. Lifetime Wellness
   (5 units, with at least one course from each E.1. and E.2.)
1. PE &/or Dance (waived for Veterans, P.O.S.T. Basic Academy, or Basic Fire Academy Graduates)*
   Developmental Services 50, 51, 52, 53, 54, 55
2. Lifetime Skills
   Allied Health 1
   Business Administration 30
   Child Development 30, 38, 39
   Counseling 53
   Food and Nutrition 35, 40
   Health Science 1
   Human Services 10, 44
   Psychology 2/2H, 25, 33, 38, 39
   Sociology 5, 7, 10, 31, 32
   Women's Studies 5, 7
   *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.
     o Exemption forms are available at the Health Services office, Students Services Building, lower level.
     o Must be documented as permanent by student's physician.
     o Once verified, Health Services will forward the completed exemption form to Admissions and Records.
   - Fresno City College will award 2 units of PE and 3 units of credit for the Fresno City College AA AS Degree in the Lifetime Wellness Area. Students planning to transfer to a CSU will earn 3 units toward CSU General Education Area E Lifelong Learning and Self Development. Additional credit may be awarded as a non-transferable elective credit after evaluation of transcripts.

F. Government and American Institutions (3 units)
   Political Science 2/2H or 110

G. Communication (3 units)
   Communication 1, 2, 4, 8/8H, or 25

Application for Associate Degree or Certificate of Achievement
   A candidate for an associate of arts degree, associate of 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.
   Effective with the fall 2017 semester, a student may earn more than one certificate from Fresno City College. A student may declare and pursue more than one certificate simultaneously. The same certificate cannot be awarded from more than one college in the district. Please see a counselor for more information.
TRANSFER INFORMATION AND 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 certificate and/or associate degree programs may vary. Through careful planning with the Fresno City College Counseling/Transfer Center, a student may be able to earn a certificate and/or associate degree while meeting specific transfer requirements of their intended college or university. There are differences in the transfer requirements for each college and university (please consult the catalog of that specific college or university). Therefore, it is advisable for students to develop a Student Educational Plan (SEP) with a counselor to fulfill those specific requirements.

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 51 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 53. 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](http://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](http://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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<tr>
<th>C-ID Number</th>
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<td>ACCT 110</td>
<td>Accounting 4A, Financial Accounting</td>
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<tr>
<td>ACCT 120</td>
<td>Accounting 4B, Managerial Accounting</td>
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<tr>
<td>AJ 110</td>
<td>Criminology 1, Introduction to Criminology</td>
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<tr>
<td>AJ 120</td>
<td>Criminology 6, Concepts of Criminal Law</td>
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<td>AJ 122</td>
<td>Criminology 4, Principles and Practices of the Justice System</td>
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<td>AJ 124</td>
<td>Criminology 3, Legal Aspects of Evidence</td>
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<td>AJ 140</td>
<td>Criminology 8, Criminal Investigation</td>
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<td>AJ 150</td>
<td>Criminology 9, Crime Scene Forensic Investigation</td>
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<td>AJ 160</td>
<td>Criminology 5, Community Relations</td>
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<td>AJ 200</td>
<td>Criminology 20, Introduction to Corrections</td>
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<td>AJ 220</td>
<td>Criminology 11, Juvenile Delinquency</td>
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<td>C-ID Number</td>
<td>Fresno City College Course</td>
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<td>ANTH 110</td>
<td>Anthropology 1, Biological Anthropology</td>
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<td>ANTH 120</td>
<td>Anthropology 2 or 2H, Cultural Anthropology</td>
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<td>ANTH 130</td>
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<td>ANTH 150</td>
<td>Anthropology 4, Introduction to Archaeology</td>
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<td>ARTH 100</td>
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<td>ARTH 110</td>
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<td>ARTH 120</td>
<td>Art 6 or 6H, Art History Renaissance to Modern</td>
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<td>ARTH 130</td>
<td>Art 55, Introduction to Asian Art</td>
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<td>ARTH 145</td>
<td>Art 60 or Chicano-Latino Studies 22, Art of the Ancient Americas</td>
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<td>Art 3, Two-Dimensional Design</td>
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<td>ARTS 101</td>
<td>Art 4, Three-Dimensional Design</td>
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<td>ARTS 110</td>
<td>Art 7, Beginning Drawing</td>
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<td>ARTS 200</td>
<td>Art 8, Beginning Figure Drawing and Anatomy</td>
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<td>ARTS 205</td>
<td>Art 17, Intermediate Drawing</td>
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<td>ARTS 210</td>
<td>Art 9, Beginning Painting: Oil/Acrylic</td>
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<td>ARTS 250</td>
<td>Art 52, Introduction to Digital Art/New Media</td>
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<td>ARTS 280</td>
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<td>BIOL 110B</td>
<td>Biology 20, Human Anatomy</td>
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<tr>
<td>BIOL 115S</td>
<td>Biology 21A + Biology 21B, Human Anatomy &amp; Physiology</td>
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<tr>
<td>BIOL 120B</td>
<td>Biology 22, Human Physiology</td>
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<td>BIOL 130S</td>
<td>Biology 4 + Biology 6, Principles of Zoology and Principles of Botany</td>
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<td>BIOL 190</td>
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<td>BUS 110</td>
<td>Business Administration 10, Introduction to Business</td>
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<td>BUS 120</td>
<td>Business Administration 18, Business and the Legal Environment</td>
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<th>C-ID Number</th>
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<tr>
<td>CDEV 100</td>
<td>Child Development 39 or Psychology 39, Child Growth and Development</td>
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<td>CDEV 110</td>
<td>Child Development 30, Child, Family and Community</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.

Students should acquaint themselves with the current catalog of the college to which they plan to transfer. The FCC Transfer Center can provide students with CSU transfer requirements. 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 college 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., 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.
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, 8/8H
- **Area A2, Written Communication**
  English 1A/1AH
- **Area A3, Critical Thinking**
  Communication 25
  Criminology 13
  English 3/3H
  Philosophy 2/2H, 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, 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(L), 11B(L), 14, 20(L), 21A(L), 21B(L), 22(L), 31(L), 55
- **Area B3, Laboratory Activity**
  Anthropology 1L
  Chemistry 1A, 3A, 29A, 29B
  Geography 1
  Geology 2L
  Physics 4A, 4B, 4C
- **Area B4, Mathematics/Quantitative Reasoning**
  Computer Science 26
  Decision Science 21, 23
  Mathematics 3A, 4A, 4B, 5A, 5B, 6, 10A, 10B, 11/11H, 17, 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, +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, 4, 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, 2
  Hmong 1, 2
  Humanities 10, 11, 42
  Japanese 1, 2
  Linguistics 10/10H
  Philosophy 1A/1AH, 1B, 1C/1CH, 3A, 3B
  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
Six semester units minimum.
- African-American Studies 1, 4, 34
- American Indian Studies 31, 34
- American Studies 11
- Anthropology 2/2H, 3, 4, 8, 12
- Asian-American Studies 1, 10, 15, 25
- Business Administration 20
- Chicano-Latino Studies 11, 12A, 12B, 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 38, 39
- Counseling 53
- Food and Nutrition 35, 40
- Health Science 1


Psychology 2/2H, 25, 33, 38, 39

Area F: Ethnic Studies

Three semester units minimum.

- Chicano-Latino Studies 24, 33
- Ethnic Studies 10
- Women's Studies 24

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 27B, can be counted only once.

Some CSU campuses have restrictions on when courses in AREAS A and B4 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 2/2H or 6. These courses may also be used simultaneously to satisfy course requirements on the CSU GE-Breadth pattern. (See page 50).

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, 53, 54A, 56, 57, 61, 70, 73
Aerospace Studies 1A, 1B, 2A, 2B, 3A, 3B, 3C, 3D
African-American Studies 1, 2, 3, 4, 5, 6, 8, 15, 17, 34, 41
Allied Health 1, 2, 3, 19, 20, 21
American Indian Studies 31, 32, 34, 35
American Sign Language 1, 2, 3, 4, 5, 6, 7, 8, 20, 21, 22
American Studies 11
Anthropology 1, 1L, 2/2H, 3, 4, 8, 12, 13, 15, 16A, 16B, 24, 28, 30
Applied Technology 10, 19, 21, 40
Architecture 10, 11, 12, 14, 15A, 15B, 20, 21, 22, 24, 30, 31, 32, 34, 40, 41A, 42
Armenian 1, 2
Asian-American Studies 1, 8, 10, 15, 25, 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, 11B, 14, 20, 21A, 21B, 22, 31, 46, 47, 55
Business Administration 5, 10, 18, 19, 20, 25, 28, 30, 31, 33, 34, 35, 38, 40, 43, 51, 52
Business & Technology 1, 2, 5, 6, 7, 9, 10, 18, 19, 23, 24, 25, 26, 28, 29, 31, 33, 43
Child Development 1, 3, 5, 6, 9, 10, 11, 12, 15, 16, 17A, 17B, 19, 20, 30, 37A, 37B, 38, 39, 40A, 40B, 42, 43, 45, 47, 53, 56
Chinese 1, 2
Communication 1, 2, 4, 8/8H, 10, 12, 25, 26
Computer Aided Drafting and Design 14, 16, 22, 24, 26A, 28, 32, 36A, 42
Computer Aided Manufacturing 5, 10, 15, 20, 26, 31
Computer Information Technology 12, 15, 19, 21, 23, 28, 31, 40, 45, 46A, 48B, 49, 50, 54A, 54B, 55, 57, 58B, 58C, 58D, 58E, 58F, 59, 60, 63, 65, 66, 69, 70, 80, 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, 56B, 60
Counseling 43, 48, 53, 54
Criminology 1, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 15, 16, 18, 19, 20, 23, 24, 28, 36
Decision Science 10, 21, 23, 25, 40, 44, 55
Dental Assisting 1, 2, 3, 3A, 19
Dental Hygiene 1A, 18, 1C, 1D, 2, 3A, 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, 10, 19, 19X, 30

Engineering 1A, 2, 4, 4L, 5, 6, 8, 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
Ethnic Studies 10
Fashion Merchandising 19, 26, 27
Film 1, 2A, 2B, 3, 5, 6, 7
Fire Technology 1, 2, 3, 4, 5, 8, 9, 14, 19, 22A, 22B, 23, 24, 25, 26, 27, 29, 30E, 50L, 51A, 51B, 51C, 51D
Food and Nutrition 1, 2, 35, 40, 41, 42, 43, 45
Food Service Management 11, 15, 19, 25, 35, 38
French 1, 2, 3
Geography 1, 2, 4A, 4B, 7, 8, 10, 12, 18, 20, 30
Geology 1/1H, 2, 2L, 3, 4, 5, 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, 3
Heating, Ventilation & Air Conditioning 50, 51, 52, 53, 54
History 1, 2, 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, 11, 42
Japanese 1, 2
Journalism 1, 3, 11A, 11B, 11C, 11D, 14, 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 10, 11, 12, 14, 19, 21, 22
Mathematics 3A, 4A, 4B, 4B, 4B, 5A, 5B, 6, 7, 10A, 10B, 11/11H, 17, 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, 1AE, 1B, 2A, 2B, 3, 3P, 4, 5, 5B, 6, 7A, 7B, 7C, 7D, 8, 8B, 9, 9A, 10A, 10B, 12, 13, 15, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 34, 35, 39A, 39B, 40, 41, 42A, 42B, 42C, 42D, 46, 47A, 47B, 49, 54, 55, 60, 67, 68, 72, 76, 78, 80A, 80B, 80C, 80D, 81, 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, 2/2H, 3A, 3B

Photography 5, 6, 12, 14, 15, 17, 18, 23, 26, 32, 45, 49, 52, 57, 77


Physical Science 11

Physics 2A, 2B, 4A, 4B, 4C

Political Science 1, 2/2H, 3, 5, 6, 13, 24, 25

Portuguese 1, 2

Psychology 2, 2H, 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, 6

Real Estate 40, 41

Recreation 19, 20, 21, 23


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, 6A, 6B, 6C, 10, 56, 83A

Women’s Studies 5, 7, 10, 22, 24, 25, 36, 41, 43, 44, 47

Work Experience 19

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

Transfer to University of California (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) completion of the UC transfer admission eligibility course pattern.

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 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, 3

American Indian Studies 31, 32, 34, 35

American Sign Language 1, 2, 3, 4, 6, 7, 8, 21, 22
The Associate Degree for Transfer in Theatre Arts is designed for students who plan to complete a bachelor's degree in a similar major at a California State University campus.

To earn a transfer degree, students must complete a maximum of 60 units of CSU-transferable coursework with a minimum 2.0 GPA.

**American Studies** 11
**Anthropology** 1, 1L, 2/2H, 3, **4, 8, 12, 13, 15, *16A, *16B, 24, 28**
*6A, 16B and 24 combined: 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
**Asian-American Studies** 1, 8, 10, 15, 25, 55
**Astronomy** 10
**Biology** *3, 4, 5, 6, 7, 11A, 11B, 14, 20, 21A, 21B, 22, 31, **55
*No credit for 3 if taken after 11A.
**No credit for 55 if taken after 20 or 21A.
**Business Administration** 10, 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, 13, 14, 17A, 17B, 20, 21, 22, 24, 27A, 27B, 28, 29, 30, 33
**Child Development** 30, 38, 39
**Chinese** 1, 2
**Communication** 1, 2, *4, 8/8H, 10, 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, 54
**Criminology** 1, 5, 6, 13
*Any or all of these PE Activity courses combined: maximum credit, 4 units.
**Decision Science** 10, *21, **23, 25, 40, 44
*21, Math 21 combined: maximum credit, 1 course.
**23, Math 11/11H, 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, 4L, 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
**Ethnic Studies** 10
**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, *9, 12
*No credit for 9 if taken after 1, 2/2L, 3, 4, 5 or ASTRO 10.
**German** 1, 2
**Global Studies** 1, 2
**Graphic Communications** 15, 24A, 27, 31, 34, 39A, 40A, 41, 47
**Health Science** 1, 2, *3
*Any or all of these courses combined: maximum credit, 8 units
**History** 1, 2, 3, 11, 12/12H, 15, 17, 18, 20, 21,
22, 23, 25, 29, 30, 34
**Hmong** 1, 2
**Honors Studies** #1A, *1C, 1D, 1E
#Variable topics; evaluation completed by individual campuses after admission.
*1C must be taken concurrently with PHIL 1AH, ENGL 3H, ART 5H or ART 6H for credit.
**Human Services** 10, 20
**Humanities** 10, 11, 42
**Japanese** 1, 2
**Journalism** 1, 16
**Linguistics** 10, 10H
+3A and 4B combined: maximum credit, 5 semesters/7.5 quarter units.
*10A and 10B combined: maximum credit, 1 course.
°11/11H, 42, Decision Science 23, and Psychology 42 combined: maximum credit, 1 course.
*Any or all of these courses and Aerospace Studies 1A, 1B, 2A, 2B, 3 combined: maximum credit, 8 units.
**Music** 1A, 1AE, 1B, 2A, 2B, *3, 4, 5, 6, 7A, 7B, 7C, 7D, 8, 9, 10A, 10B, 12, 13, 15, 16, 17, 18, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 34, 35, 39A, 39B, 40, 41, 42A, 42B, 42C, 42D, 46, 47A, 47B, 49, 54, 55, 59, 60, 68, 72, 76, 80A, 81, 92
*No credit for 3 if taken after 1A.
**Natural Science** 1A
**Philosophy** 1A/1AH, 1B, 1C/1CH, 2/2H, 3A, 3B, 6
**Photography** 5, 6, 12, 15, 17, 18, 23, 49, 57
*Any or all of these PE Activity courses combined: maximum credit, 4 units.
+Any or all of these PE Theory courses combined: maximum credit, 8 units.

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Physical Science *11
*No credit if taken after a college level course in Physics or Astronomy.

*2A and 2B and 4A, 4B, 4C combined: maximum credit, 1 series. Deduct credit for duplication of topics.

Political Science 1, 2

Psychology 2H, 5, 16, 25, 33, 36, 38, 39, *42, 45
*42, Math 11/11H, 42 and Decision Science 23 combined: maximum credit, 1 course.

Sociology 1A, 2

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.

*41 and 42 combined: maximum credit, 1 course.

Women's Studies 5, 7, 10, 22, 24, 36, 41, 47

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. Honor Course Credit Limitation—duplicate credit will not be awarded for both the honors and regular versions of a course. Credit will only be awarded to the first course completed with a grade of “C” or better.

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 8/8H, 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 3A, College Algebra ......................... 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 11/11H, Elementary Statistics .......... 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 15A, History of Architecture I.............3
Architecture 15B, History of Architecture II............3
Art 2, Art Appreciation....................................3
**Art 5/SH, 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
Art 70, Modern and Contemporary Art..................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 15, World Music Survey............................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 Literature/Folklore......................3
Armenian 2, High-Beginning Armenian ................3
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 1C, Introduction to Shakespeare...............3
**English 1D, Introduction to Shakespeare...............3
**English 2A, History of American Literature since 1648.........................................................3
English 35, American Sign Language..........................5
English 44A, Survey of World Literature to the Mid-Seventeenth Century....................3
English 44B, Survey of World Literature from Mid-Seventeenth Century to 1950...........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
Film 2A, History of Cinema 1895-1960................3
Film 2B, History of Cinema 1960-Present...............3
Film 3, Film and Culture.........................................3
French 2, High-Beginning French..........................5
French 3, Intermediate French.............................5
German 2, High-Beginning German.........................5
**History 1, Western Civilization to 1648................3
**History 2, Western Civilization since 1648...........3
Hmong 2, High-Beginning Hmong...........................5
**Humanities 10, Classical Humanities..................3
**Humanities 11, Modern Humanities....................3
Humanities 42, Classic Myths...............................3
Japanese 2, High-Beginning Japanese....................5
Linguistics 10, Introduction to Language................3
Linguistics 10H, Honors Introduction to Language..........3
**Philosophy 1A/1AH, Theories of Knowledge and Reality..................................................3
Philosophy 1B, Social and Political Philosophy...............3
Philosophy 1C/1CH, Ethics................................3
Philosophy 3A, Ancient Philosophy.......................3
Philosophy 3B, Modern Philosophy.......................3

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Portuguese 2, High-Beginning Portuguese........5
Spanish 2, High-Beginning Spanish.................5
Spanish 2NS, Preparatory Spanish for Native Speakers..................5
**Spanish 3, 4, Intermediate Spanish ..........5-5
**Spanish 3NS, 4NS, Intermediate Spanish for Native Speakers........5-5
Spanish 5, The Short Story: Mexico, Spain, and the U.S. ....................4
Spanish 6, The Short Story: Latin America ........4
Spanish 7, Advanced Spanish: Comp and Grammar............................4
Spanish 41, Introduction to Poetry in Spanish .....................................4
Spanish 42, Hispanic American Culture ........4
Women's Studies 36, Women's Literature ..........3

Area 4 – Social and Behavioral Sciences
At least three courses from at least two different disciplines (nine semester units minimum).

4 Social Sciences
Anthropology 12, Visual Anthropology: Introduction to Ethnographic Film........3
Asian-American St 10, Hmong Culture ..........3
Asian-American St 25, Asian American Social Issues ..................3
Chicano-Latino St 30, Migration and the Family: Social and Psychological Perspectives ..3
Global Studies 1, Introduction to Global Studies ..................................3
Global Studies 2, Global Issues ........................3
Women's Studies 22, History of American Women.................................3

4A Anthropology and Archaeology
**Anthropology 2/2H, Cultural Anthropology ......3
Anthropology 3, Archaeology and World Prehistory ..................................3
Anthropology 4, Introduction to Archaeology ......3
Anthropology 8, Language and Culture ..........3

4B Economics
**Economics 40/40H, Introduction to Microeconomics .......................3
**Economics 50/50H, Introduction to Macroeconomics .......................3

4C Ethnic Studies
African-American St 1, Introduction to African American Studies...............3
African-American St 34, History of the American Civil Rights Movement........3
American Indian St 31, American Indian Culture ..........................3
American Indian St 34, American Indian in Contemporary Society.............3
Asian-American St 1, Indo-Chinese Americans ..................................3
Asian-American St 15, Introduction to Asian-Americans .......................3
Chicano-Latino St 11, Introduction to Chicano-Latino Studies .................3
History 34, History of the American Civil Rights Movement ................3
Journalism 16, Race, Gender and the Media..................................3

4D Gender Studies
History 22, History of American Women.................3
Journalism 16, Race, Gender and the Media..................3
Women's St 10, Changing Roles of Women.................3
Women's Studies 47, Introduction to Lesbian and Gay Studies................3

4E Geography
Geography 2, Cultural Geography ..................3
Geography 4A, 4B, World Geography ..................3-3
Geography 20, Geography of California ..................3

4F History
African-American St 4, Classical and Pre Colonial Africa ..................3
African-American St 34, History of the American Civil Rights Movement ....3
Chicano-Latino St 29, History of Mexico, Colonial to Contemporary Period ....3
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
### 4G Interdisciplinary, Social & Behavioral Sciences
- Child Development 30, Child, Family, and Community .................................................. 3
- Child Development 39, Child Growth and Development .................................................. 3
- Ethnic Studies 10, Introduction to Ethnic Studies ......................................................... 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

### 5A Physical Sciences
- Astronomy 10(L), Basic Astronomy ........................................................................... 3
- **Chemistry 1A(L), 1B(L), General Chemistry .......................................................... 5
- **Chemistry 3A(L), Intro General Chemistry .............................................................. 4
- Chemistry 8A, Elementary Organic Chemistry ......................................................... 3
- Chemistry 28A, Organic Chemistry I ........................................................................ 3
- Chemistry 28B, Organic Chemistry II ....................................................................... 3
- **Geography 1(L), Physical Geography .................................................................... 4

### 4B Biological Sciences
- Anthropology 1, Biological Anthropology .................................................................. 3
- **Biological Science 3(L), Introduction to Life Science .............................................. 4
- Biology 4(L), Principles of Zoology ........................................................................... 4
- Biology 5(L), Human Biology .................................................................................. 4
- Biology 6(L), Principles of Botany ............................................................................. 5
- Biology 11A(L), Biology for Science Majors .............................................................. 5
- Biology 11B(L), Biology for Science Majors II .......................................................... 5
- Biology 14, Conservation Biology ............................................................................ 3
- Biology 20(L), Human Anatomy .............................................................................. 4
- Biology 21A(L), Human Anatomy and Physiology .................................................. 4
- Biology 21B(L), Human Anatomy and Physiology II .............................................. 5
- Biology 22(L), Human Physiology ......................................................................... 5
- Biology 31(L), Microbiology ................................................................................... 5
- Biology 55, Introduction to the Biology of Humans .................................................. 3

### 5B Biological Sciences
- Anthropology 1, Biological Anthropology .................................................................. 3
- **Biological Science 3(L), Introduction to Life Science .............................................. 4
- Biology 4(L), Principles of Zoology ........................................................................... 4
- Biology 5(L), Human Biology .................................................................................. 4
- Biology 6(L), Principles of Botany ............................................................................. 5
- Biology 11A(L), Biology for Science Majors .............................................................. 5
- Biology 11B(L), Biology for Science Majors II .......................................................... 5
- Biology 14, Conservation Biology ............................................................................ 3
- Biology 20(L), Human Anatomy .............................................................................. 4
- Biology 21A(L), Human Anatomy and Physiology .................................................. 4
- Biology 21B(L), Human Anatomy and Physiology II .............................................. 5
- Biology 22(L), Human Physiology ......................................................................... 5
- Biology 31(L), Microbiology ................................................................................... 5
- Biology 55, Introduction to the Biology of Humans .................................................. 3

### 5C Anthropology Laboratory
- Anthropology 1L, Biological Anthropology Lab .......................................................... 1
- Chemistry 1A, General Chemistry ............................................................................. 5
- Chemistry 3A, Introduction to General Chemistry .................................................... 4
- Chemistry 29A, Organic Chemistry Lab I ................................................................. 2
- Chemistry 29B, Organic Chemistry Lab II ............................................................... 2
- **Geography 1(P), Physical Geography .................................................................... 4
- Geology 2L, Historical Geology Lab ......................................................................... 1
- Physics 4A, 4B, 4C, Physics for Scientists and Engineers ........................................... 4
- **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 12, Environmental Science ....................................................................... 3
- **Geography 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

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**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").
### Area 6A – UC Requirement in Language Other than English

Proficiency equivalent to two years of high school study in the same language with “C” or better grades (at Fresno City College one course required if not met by high school foreign language).

<table>
<thead>
<tr>
<th>Language</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>American Sign Language</td>
<td>American Sign Language 1, Beginning</td>
<td>4</td>
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<tr>
<td></td>
<td>American Sign Language 2, High-Beginning</td>
<td>4</td>
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<tr>
<td></td>
<td>American Sign Language 3, Intermediate</td>
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<td></td>
<td>American Sign Language 4, High-Intermediate</td>
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<tr>
<td></td>
<td>Intermediate American Sign Language</td>
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<td>Armenian 1</td>
<td>Beginning Armenian</td>
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<td>Armenian 2</td>
<td>High-Beginning Armenian</td>
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<td>Chinese 1</td>
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<td>Japanese 2</td>
<td>High-Beginning Japanese</td>
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<td>Portuguese 1</td>
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<td>Portuguese 2</td>
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<td>**Spanish 3</td>
<td>Intermediate Spanish</td>
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<td>**Spanish 3NS</td>
<td>Intermediate Spanish for Spanish Speakers</td>
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<td>**Spanish 4</td>
<td>High-Intermediate Spanish</td>
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<td>**Spanish 4NS</td>
<td>High-Intermediate Spanish for Spanish Speakers</td>
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<tr>
<td>Spanish 7</td>
<td>Advanced Spanish: Composition and Grammar</td>
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<td>American Sign Language 3, Intermediate American Sign Language</td>
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<tr>
<td>**Spanish 4NS</td>
<td>High-Intermediate Spanish for Spanish Speakers</td>
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</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](http://www.universityofcalifornia.edu).

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### CSU Graduation Requirement in U.S. History, Constitution, and American Ideals

One course from each group (six semester units minimum). If a course is approved for more than one US Area below, a student may use the course to satisfy all areas listed. This requirement is NOT part of IGETC, but may be completed prior to transfer. CSU campuses have the discretion whether to allow courses to satisfy the CSU United States History, Constitution and American Ideals (AI) graduation requirement to count in both Areas 3B/4 and to meet the AI graduation requirement.
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.

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**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.

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**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 their 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 them 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 their 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 they were 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

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 ó 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 Rehabilitación 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

Fresno City College reconoce su obligación de proveer accesibilidad total al programa a través de Fresno City College para personas discapacitadas. Contácte al Vicepresidente de Estudiantes para obtener información con respecto a la existencia y localización de los servicios, actividades e instalaciones a que tienen acceso y pueden ser usadas por las personas discapacitadas.

La falta de habilidad en el idioma Inglés no deberá ser un obstáculo a la admisión y participación en los programas de educación vocacional de Fresno City College.

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 bawv ntawm haiv neeg, ntawm nqaij-tawv, tuaj bawv tej chaws tuaj, poj-niam, bxiv-neej, neeg xiam oob khab, laus-hluas, los yog qhov kev xaiv ntawm tej kev nkauij nraug li cas nyob rau hauv nws bxoj cai, kev khiav dej-num, los yog kev coj, kom raws li bxoj cai Title VI ntawm Civil Rights Act ntawm 1964 (uas hais txog ntawm haiv neeg, nqaij-tawv, thiab tuaj bawv teb chaws tuaj), Title IX ntawm qhov Education Amendments ntawm xyoo 1972 (hais txog poj niam-bxiv neej), Section 504 ntawm Rehabilitation Act ntawm xyoo 1973 (hais txog neeg xiam oob khab), qhov Americans with Disability Act thiab qhov Age Discrimination Act ntawm xyoo 1975 (hais txog laus-hluas), thiab 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 ntawv thiab kev ua hauj-Iwm nyob hauv college tej programs thiab Iwm yam rau buhua tus, nrog rau kev kawm hauj Iwm nyob hauv tsev kawm ntawv. Yog xav paub btxog bxoj cai vaj-huam sib luag no, muaj kev tsis txaus siab los sis xav tau ib daim ntawv qhia btxog bxoj cai ntxub kev tawm suab txog tej kev tsis btxaus siab thauv raug neeg ntxub ntxaug 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 kawn ntawv paub txog nws lub luag dej num hais lias yuav bsum rau muaj program nyob thob plaws hauv tsev kawn ntawv rau cov neeg xiam oob khab. Hu rau Dean of Students, rau tej kev paub thiab tej chaw pab, uas muaj rau cov neeg xiam oob khab.

Tus ho tsis paub lus As-kiv zoo los yeej tsis muaj teeb meem li cas rau nws tuaj mus kawn ntawv thiab kawn hauj lwu nyob rau hauv tsev kawn ntawv qilib siab no li.

Yog xav paub txog Tsoom Fwv tej cai tswj txog ghov tsis pub muaj kev nxub-nbaug nyob rau hauv tej tsev kawn 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.

2022-2023 Fresno City College Catalog
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.bkstr.com/fresnoccstore.

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.bkstr.com/fresnoccstore. 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.
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.

The Counseling Department is located on the second floor of the Student Services Building (ST/Bldg 10). There are different ways to meet with a Fresno City College counselor. To determine which option is best for you visit our website at: www.fresnocitycollege.edu/counseling.

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 dreamcenter@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 certified DSP&S staff; assessment by certified DSP&S staff; or review of documentation by certified 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.

### 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.

### 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 support 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 counseling, 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, and/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), also known as NextUp, 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.
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
- Cal Grants
- Student Success Completion 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
- Becas de Éxito Estudiantil para Estudiantes para Completar
- Becas Cal Grant
- 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 en un programa de logro académico 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 ntawv qib siab muaj nyiaj pub rau cov neeg kawm tau ntaww zoo, muaj nyiaj pub dawb, muaj nyiaj bxais thibti nyiaj ua hauj lwm pub rau cov neeg kawm ntaww. Cov kev pab hauv qab no yog cov muaj pab rau cov tub ntxhais kawm ntaww uas muaj feem bxais tuo:

- Qhov Nyiaj Tsoom Fwv Muab Pab (Federal PELL Grants)
- Qhov Nyiaj Tsoom Fwv Them Ua Hauj Lwm (Federal Work Study)
- Qhov Nyiaj Pab Nbxiv Rau Kev Kawm Ntaww (Federal Supplemental Educational Opportunity Grants)
- Qhov Nyiaj Txaas Los Ntawm Tsoom Fwv (Federal Direct Student Loans)
- California Community College lub Grant es Pab Nyiaj
- Qhov Nyiaj Pab Los Hauv Xeev California (Cal Grants)
- Cov tub ntxhais kawm ntaww pob nyiaj (completion 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 ib tug neeg kwam ntaww twg yuav siv niyaj thaj tsam pes tsawg no muaj qhia nyob ntawm www.fresnocitycollege.edu/financialaid/.

Muaj cov ntaww ua mus thov cov niyaj no thiab muaj cov ntaub ntawv qhia txog cov qhoos kas pas nqya ntoi no nqyab hauv loos kam Financial Aid Office, chav 201, Hauv lub tsev hu ua Student Services Building.

Cov neeg kwam ntaww yuav tsum ua cov ntaub ntawv thov cov niyaj no tuaj ua ntej lub 3 hilis tim 2 bxhuay xhiaj yuav tau txiais cov niyaj los kwam ntaww rau tauum lub 8 hilis yog laww muaj feem txiais tais. Cov neeg kwam ntaww uas thov rau lub caij hais no yog cov yuab xub txai baiis, yog laww muaj feem, tabsis rau lwm lub xxev thiab lwm yam kev paslos hauv tsomw lwos los ces tsuav tuaj txog hauv Loos Kam Financial Aid Office ua ntej lub 4 hilis, tim 15 xwb ces tau laww. Yom xav paub ntawv tshaj nov, hu tau rau (559) 442-8245.

Cov Hoob Uas Rov Qab Kawm Tau

Cov neeg kwam ntaww txuas tau them rau cov hoob uas laww kwam dhau xwb, tabsis tsuas pub 2 zaug xwb. Yom ib tug neeg kwam ntaww xav rov qab kawm dub zaub 3, nws qhov qhab nias yuav muab rho tawm los hauv qhov qhab nias uws muaj feem baiis tau raws li bojx cai Title IV. Txawm tau tus “D” xwb los hauv qhov chaw muab niyaj pas no yuav tsi xam laww kwam muaj lwm bojx cai bww los tsis ua cas.

Kev Muab Cov Niyaj No Them Rov Qab Tuaj Thaum Koj Muab Cov Hoob Rho Tawm

Thaum ib tug neeg kwam ntaww muab nws cov hoob rho tawm txog 60 feem pua tauj ib tog xyoa laww, Loos Kam Pab Niyaj Financial Aid Office mam bxiav txim seb nws cia pes tsawg thiab muab pes tsawg rov qab mus rau tsoom fwv.

Chaw Pab Niyaj Qhov Kev Ncai Ncees

Ua ntej yuav muaj feem baiis tau cov niyaj pas raws li Title IV uas yog cov niyaj pas los hauv Tsoom Fwv lub Loos Kam Saib Xyuas KEV Kawn (U.S. Department of Education and the State Center Community College District), txhua tus neeg kwaw ntaww yuav tsawm kwam kom tau nyob rau qhov uws nyaw tawm tuaj ib qib tsis hais yuav vog 2 xyoos es ho rov mus kwam kom puv 4 xyoos nbxiv.

Cov neeg kwaw ntaww tus qhab nias yuaw tsawm tsis txhob poob qis tshaj 2.0 thiab yuav tsawm kwaw baiis kwog 67 feem pua ntaww cov hoob uas koj mus cuv npe nq yuaw baiis tau cov niyaj pas raws li qhov chaw muab niyaj Financial Aid Satisfactory Academic Progress Policy baij cai tais hais. Thaum cov neeg kwam ntaww no kwam tau qhab nias txog 150 feem pua los ntaww cov laww yuav tsum tau kwam laww ces luaw yuav tsis muab cov niyaj pas rau nws txog kev kwaw laww. Dhau ntaww, luaw yuav tsis kam pas niyaj rau cov hoob uas kwaw los lwm hauv yog ntau tshaj 30 qhab nias laww. Nws yuav tsum nkag mus koom nyob rau Tsev Qhia Ntaww Fresno City College qhov qhoos kas saib xyuas cov hoob no thiab cov hoob uas kwaw bxhawb no yuav tsum pab tau koj mus kwam rau ib siab nbxiv.

Tag nrho cov neeg kwam ntaww uas raug bxiav tsis pas niyaj rau laww kwam ces yuav tsis muaj feem nkag tau rau qhov qhoos kas pas nqya no laww vim laww kwam tsis tau ntaww los sis kwam tsis tau qhab nias zoo muaj cai sau ntaww tuaj foob qhov kev bxiav txim no tau. Pas neeg saib xyuas qhov kev foob (The Financial Aid Appeal Committee) yuav ua tib zoo saib tus neeg kwam ntaww no cov kev kwam thib yuaw bxiav txim seb tus neeg kwam ntaww no puas muaj feem yuav nkag tau rau lub qhov kas pas nqya no. Muaj daim ntaww los npe tsis baiis siab (Petitions) nyob hauv loos kam pas niyaj (Financial Aid Office).

Pib kiag yxoo kwam ntaww 2012-13 no mus, cov neeg kwam ntaww uas muaj feem baiis pas nqya puab dawb hu ua Pell grant no yuav tau baiis kom puv 12 zaug rau them kwam ntaww(12 full-time semesters). Tag nrho cov uas twb tau baiis pas nqya Pell grant no dua laww los tseem yuav xam tib si nrog rau cov hais lub sihjawm no. Thaum ib tug neeg kwam ntaww twg siv nws pas nqya Pell grant no tag laww ces nws yuav tsis baiis ib qho dabtsi nbxiv li laww tsis hais yuav mus lub tsiw kwam ntaww twg li. Tsis muaj kev yuaw foob tau qhov uas luag pub rau koj noj txis mus li no.

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 and lunch Monday through Friday.

The Staff Dining Room provides a quieter atmosphere for eating 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.

The Ram Pantry is a free food assistance service for college students enrolled at Fresno City College. The Ram Pantry believes that food insecurity should not be a barrier to success for students. The goal is to increase the graduation and course completion rate for our students.
Students can visit the Ram Pantry Tuesday–Thursday from 9am-4pm, located downstairs in the Student Center. Students must be currently enrolled, provide their student ID number, and bring their own bag in order to access Ram Pantry Services.

A variety of food trucks are available on campus Monday through Thursday from 11:00 a.m. – 2:00 p.m. to serve students, faculty and staff each semester.

**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.

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 (LRC), 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.

All services are available online and face-to-face. Up-to-date information about all of the LRC services can be found on the web site. Resources and information about LRC services can also be found in the Student Success Class or the Student Support Hub located on the student Canvas dashboard.

**Library**

The college Library provides improved Wi-Fi access and space for studying and collaborating with classmates, 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 60,000 print books and approximately 100 periodicals and newspapers, and provides access to more than 25,000 ebooks and 75 online research databases that include streaming audio and video.

The Library has a 30-station computer lab equipped with internet access and standard software. There are a limited number of audiovisual materials, such as audiobooks, CDs, and DVDs that can be checked out. Black & white and color copiers and printers are available for a small fee. The Library has ADA accessible workstations and equipment.

Students can also book an appointment with a Librarian for research assistance, check out a laptop, iPad, or calculator, access a required textbook in the Reserve Collection, use a computer or just have a quiet study space. Librarians and Library staff are always available to provide individual assistance in the use of all the learning resources in the library. Librarians can be contacted at the Reference Desk, through online chat, texting, and email at [https://www.fresnocitycollege.edu/academics/library/index.html](https://www.fresnocitycollege.edu/academics/library/index.html), or by phone at (559) 442-8204.

**Tutorial Services LI-134**

The Tutorial Center offers free drop-in 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. Tutoring schedules vary from course to course so students should check tutor availability with the Tutorial Center receptionist. For more information, go to [https://www.fresnocitycollege.edu/academics/tutoring/tutorial-center.html](https://www.fresnocitycollege.edu/academics/tutoring/tutorial-center.html), log into Canvas at [https://scccd.instructure.com/courses/14521/pages/general-online-tutoring](https://scccd.instructure.com/courses/14521/pages/general-online-tutoring), or call (559) 442-8209.

**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. 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 in the West Wing of the Library and provides access to a librarian for assistance in research for college papers. Limited free printing is available for any classroom assignments for which tutoring is provided when on campus. Find the WRC on Zoom at [https://cccconfer.zoom.us/j/7446311546#success](https://cccconfer.zoom.us/j/7446311546#success), log into Canvas at [https://scccd.instructure.com/courses/14521/pages/writing-and-reading-center](https://scccd.instructure.com/courses/14521/pages/writing-and-reading-center), or call (559) 332-3669 or (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 on which math classes have embedded tutors, go to https://www.fresnocitycollege.edu/academics/tutoring/math-support-center.html. Find the Math Support Center on Zoom at https://www.fresnocitycollege.edu/academics/tutoring/math-support-center.html, log into Canvas at https://scccd.instructure.com/courses/14521/pages/math-support-center, or call (559) 442-8209.

Extending the Class (ETC)

ETC provides class-specific study and review sessions led by a student who has recently taken the class from the same instructor and received a high final course grade. Within their ETC sessions, students actively engage with the material through group work and student-to-student interaction. ETC leaders are assigned to specific classes. Check with your instructor to see if you have an ETC leader in your class or find a list of course sections and assigned peer leaders at https://www.fresnocitycollege.edu/academics/tutoring/extending-the-class.html. For more information, log into Canvas at https://scccd.instructure.com/courses/14521/pages/etc, or call (559) 442-8216.

PASS English Support Center LI-142

The PASS English Support Center provides experienced peer leaders/tutors for supplemental instruction and tutoring for English, EMLS (ESL), linguistics, and literature through group and individual sessions in the face-to-face and online environment. Limited free printing is available for classroom assignments for English, EMLS, linguistics, and literature students. Find the Center on Zoom at https://ccccconference.zoom.us/j/4917290754?success, or log into Canvas at https://scccd.instructure.com/courses/14521/pages/pass-online-tutoring. For more information, call (559) 549-7229 or (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. Tutoring assistance with computer software and applications is provided. Copying and printing services are available for a small fee. For more information, go to https://www.fresnocitycollege.edu/academics/tutoring/tutorial-center.html, log into Canvas at https://scccd.instructure.com/courses/14521/pages/general-online-tutoring, or call (559) 442-8209.

Career Employment Center LI-147

The Career Employment Center (CEC) provides assistance with career assessments and planning, as well as conducting a job search. Services include career assessments, career counseling, resume writing, job listings, employment advising, job search workshops, on-campus interviews with employers, and job fairs.

The CEC also provides services for employers who are interested in listing job openings through the online job posting board, Jobspeaker. For more information please call (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 Office

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 “e 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 instruction, sustained academic counseling, and mentoring by professionals from the community. Students participate in the program for three consecutive semesters. Students in their first semester will take English 1A, English 205, and Counseling 43. In the second semester, students will take English 3, Counseling 54, and Chicano-Latino Studies 11. Students 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 or email: puente@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 (SYMBAAA)

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 Counseling 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 participate in team-building 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 email: kami.thepphavong@fresnocitycollege.edu.

TRIO Programs

In commitment to providing educational opportunity for all citizens, Fresno City College has been awarded three 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 rewarding 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) 443-8689.

Student Support Services Career Technical Education in Science, Technology, Engineering, and Mathematics Program (SSS CTE-STEM)

SSS CTE-STEM serves 120 FCC first generation, low income and disabled students in CTE-STEM programs pursuing Automotive Manufacturing or Pre-Allied Health Majors in order to assure retention, graduation and/or transfer to a four-year college in a timely manner. SSS CTE-STEM provides advising, career planning, financial aid advising, transfer assistance, cultural events, college campus tours and lots of encouragement. Information and applications are available at https://www.fresnocitycollege.edu/student-services/programs/trio-cte-stem.html, or call (559) 492-9484.

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
- Kinesiology Club
- 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 beach volleyball, 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.

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. German Loffer 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, kinesiology, medical assistant-clinician, public health, 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. Based on high demand, the Dental Hygiene, Radiologic Technology, and Respiratory Care programs select students for admission through a lottery process. Registered Nursing also utilizes a multi-criteria screening process and lottery for admission. 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. Special programs offered at the CTC include automotive collision repair (ACRCTC), industrial training (ITCTC), maintenance mechanic (MMCTC), and manufacturing mechanic (MFG-MCTC).

CTC is located at 2930 E. Annadale Avenue, Fresno. For more information, go to www.fresnocitycollege.edu/ctc, or call (559) 265-5700.

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 126A. 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, intermediate, high-intermediate, and advanced. Additionally, EMLS offers courses in pronunciation and accent reduction and listening and speaking.

**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.

The Fire Academy is offered twice a year in the Spring and Summer semesters; both are 22 weeks long. The schedule is Monday through Friday, 6 a.m. to 5 p.m. For more information, go to [www.fresnocitycollege.edu/fireacademy](http://www.fresnocitycollege.edu/fireacademy).

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 by emailing honors@fresnocitycollege.edu.

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.
Special Areas of Study

- 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—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.

For more information, go to www.fresnocitycollege.edu/policeacademy.

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.

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.

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.

**Short Term Leave for Military Service**

Students currently serving in the U.S. Armed Forces (particularly those in the Reserve or National Guard) may be called to active duty or be required to fulfill reserve military obligations for periods shorter than 30 days. In recognition of the fact that such service is mandated by state or federal government authorities, absences for these duties shall be considered “excused absences” and shall be accommodated by the campus. This means that the student shall not be penalized for the absence.

The instructor will provide the service member with reasonable alternative arrangements and due dates to complete coursework missed due to mandatory military service. Examples of alternative arrangements may include:

- Rescheduling exams and quizzes
- Creating alternative assignments
- Offering offline opportunities to participate in class
- Establishing alternative dates, times, or modalities for presentations
- Offering independent study options to complete course requirements

Coursework submitted by the revised deadline shall not incur a reduced grade penalty.

A student whose service meets the requirements for short term military leave may also choose from the following options for absence for periods of less than 30 days of service:

- Withdraw from the institution, retroactively to the beginning of the academic term, with a full refund of tuition and fees. (California Education Code 99130).
- If at least 75 percent of the academic term has been completed, the student may request that the faculty member assign a grade for the course based on the work the student has completed. The faculty member shall make the final decision as to whether to grant the student's request. (California Education Code 99130). If the faculty member assigns a grade of incomplete for the student's coursework, the student shall have a minimum of four weeks after returning to the institution to complete the course requirements. Additional time may be granted if alternative arrangements are made with the faculty member, and provided that the alternative arrangements are consistent with the requirements of Section 824 of the Military and Veterans Code. (California Education Code 99130).

**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.

**Pending VA Payment Compliance**

In accordance with Title 38 US Code 3679 (e) Fresno City College adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post-9/11 G.I.Bill® or Vocational Rehabilitation & Employment (Ch. 31) benefits, while payment to the institution is pending from VA. Fresno City College will not:

- Prevent the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA Certificate of Eligibility (COE);
- Submit completed certification request packet;
- Provide additional information needed to properly certify the enrollment as determined by School Certifying Official.
Veteran Exceptions to Out-of-State Tuition

If you are an active duty member of the United States Military stationed in California, or are their dependent and can show the required documentation, you may qualify for a tuition exemption even if you do not otherwise qualify for California Resident status, OR

AB13 and VACA Act: You may qualify for a tuition exemption from non-resident fees even if you do not otherwise qualify for California Resident status if:

- You are a discharged member of the United States Military eligible for benefits under the Montgomery GI Bill or Post-9/11 GI Bill;
  - Or their spouse or child;
  - Or the spouse or child of a deceased member of the United States Military using benefits under the Marine Gunnery Sergeant John David Fry Scholarship;
- And the service member’s last active duty period lasted 90 days or longer;
- And it is within three years of the service member’s last day of active duty;
- And you live in California.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

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
- Criminology
- Dental Assisting
- Education
- Fashion Merchandising
- Fire Technology
- Food Service Management
- Human Services
- Journalism
- Marketing
- Medical Assisting
- Paralegal
- Physical Education
- 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
  Public Health Science 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

APPLIED TECHNOLOGY DIVISION

Administration of Justice/Police Academy
  Basic Police Academy
  Basic Supervisors
  Juvenile Correctional Officer Core
  Probation Core Course
  Requalification Basic Course
  Safety Dispatcher's Basic Course
Aerospace Studies
Applied Technology
  Employment Essentials
Architecture
  Basic Architectural Contract Document
  Basic Architectural Design
  Basic Architectural Office Practice
  Basic Architectural Skills 1
  Basic Architectural Skills 2
  Basic Digital Architecture
Apprenticeship
Automotive Collision Repair Technology
  Auto Collision Repair CTC
Automotive Technology
  Alternative Fueled Vehicle
  Diesel Technology
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
    Computer Aided Drafting and Design Entrepreneurship
  2D CAD Technician
  3D CAD Technician
  3D CAD/CAM
  CAD Technician I
  Computer Aided Manufacturing Construction
    Construction Trades I
    Construction Trades II
  LIUNA Laborers' Construction
  Residential Construction Wiring
Drafting
  Electrical Systems Technology
    Automation Control Technician
    Biomedical Equipment Technician
  Control Systems
    Electrical Systems Technology
    Electricity Fundamentals 1
    Electricity Fundamentals 2
    Electromechanical 1
    Electromechanical 2
    Facility Controls
    Industrial Automation 1
    Industrial Automation 2
    Industrial Maintenance Technician
    Introduction to Industrial Controls
    Low Voltage
    Network Security
    Photovoltaics
    Wireless Networks
  Fire Technology
    Basic Fire Academy
    Company Officer
Emergency Medical Technician I
  Emergency Medical Technician I, Refresher
  Firefighter II
  Paramedic
Graphic Communications
  Digital Media Option
  Digital Video Option
  Graphic Design Option
  Motion Graphics
  Social Media Content Design
  Video Production
Heating, Ventilation, & Air Conditioning
  HVAC Technology I
  HVAC Technology II
  Industrial Technology, Construction Emphasis
  Industrial Technology, Manufacturing Emphasis
Industrial Training, Warehouse and Distribution Careers
  Maintenance Mechanic CTC
  Maintenance Technician CTC
Photography
  Commercial Photography
  Digital Photography
  Fine Art Photography
  Photojournalism
  Professional Photography
  Social Media Imaging
  Special Event Photography
Welding Technology
  Automated Welding Systems
  Metal Fabrication Option
  Multi-Process
  Pipe and Structural Steel Certification
  Welding and Fabrication Entrepreneurship
  Welding Design and Fabrication
BUSINESS DIVISION
Accounting
  Computerized Accounting for the Workplace

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Areas of Study by Division

Business Administration
- Competencies for Today’s Evolving Workplace
- Entrepreneurial Ventures
- Entrepreneurship Skills
- Human Resources Management
- Professional and Civic Behaviors
- Retail Management

Business & Technology
- Basic Clerical Skills
- Basic Employment Skills
- Bookkeeping Fundamentals
- Business Office English
- Business Office Math Fundamentals
- Clerical Training
- Computer Applications Software
- Medical Office Assistant
- Microsoft Office Foundations
- Microsoft Word
- Office Professional — Executive Assistant Emphasis
- Office Professional — Legal Office Emphasis
- Office Professional — Medical Office Emphasis
- Office Professional — One-Person Office Emphasis
- One-Person Office

Business Management
- Business Finance and Accounting
- Business Finance and Investments
- Human Resources and Relations Management and Supervision
- Personal Finance and Investments
- Small Business Management

Computer Information Technology
- Android Application Developer
- Apple iOS Developer
- Cyber Technician Specialist
- Cybersecurity
- Computer Information Systems
- Information Security I
- Information Security II
- Microsoft Certified Specialist
- Network Security/Computer Technician
- Preparation in Microsoft Office
- System Support Specialist
- Web Page Development Option
- Web Developer
- Decision Science
- Data Analytics and Predictive Modeling

Engineering: Civil
- Engineering: Computer
- Engineering: Electrical
- Engineering: Mechanical, Aerospace, and Manufacturing
- Environmental Studies
- Geography
- Geography for Transfer
- Geology
- Geology for Transfer
- Mathematics
- Natural Science
- Physical Science
- Physics

FINE, PERFORMING, AND COMMUNICATION ARTS DIVISION
- Art
- Art History for Transfer
- Art Studio
- Communication
- Dance
- Film
- Journalism
- Music
- Theatre Arts

HUMANITIES DIVISION
- English
  - Composition
  - Creative Writing
  - Critical Thinking
  - Literature
  - Reading
- English for Multi-Lingual Students (EMLS)
- High-Intermediate Academic and Vocational EMLS
- Low-Intermediate Academic and Vocational EMLS
- Vocational ESL
- Foreign Languages
- American Sign Language
- Armenian
- Chinese
- French
- German
- Hmong
- Japanese
- Portuguese
- Spanish
- Humanities
- Linguistics
- Philosophy

MATH, SCIENCE, AND ENGINEERING DIVISION
- Astronomy
- Biology
- Human Biology
- Botany
- Chemistry
- Computer Science

SOCIAL SCIENCES DIVISION
- African-American Studies
- American Indian Studies
- American Studies
- Anthropology
- Asian-American Studies
- Chicano-Latino Studies
- Child Development
  - Child Welfare
  - Early Childhood Education
  - Early Childhood Education for Transfer
  - Early Intervention
  - Early Intervention Assistant
  - Family Child Care
  - Infant Toddler Specialist
- Criminology
  - Administration of Justice for Transfer
  - Correctional Science Option
  - Law Enforcement Option
- Culinary Arts
  - Advanced
  - Basic
  - Intermediate
- Cultural Studies
- Dietetic Service Supervision
- Economics
  - Economics for Transfer
- Education
  - Early Childhood Paraprofessional
  - Education Paraprofessional
  - Elementary Teacher Education for Transfer
  - Special Education Paraprofessional
- Food Services
  - Food and Nutrition
  - Food Service Management
  - Nutrition and Dietetics for Transfer
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<td>Photography, Social Media Imaging</td>
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<td>Photography, Special Event Photography</td>
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<td>Earth, Physical Science, &amp; Engineering</td>
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<td>Political Science for Transfer</td>
<td>7450</td>
<td>AA-T</td>
<td>History &amp; Political Science</td>
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<td>Radiologic Technology</td>
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<td>Allied Health</td>
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<td>Recreation Leadership</td>
<td>4300</td>
<td>AA, CA</td>
<td>Physical Education</td>
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<td>Respiratory Care Practitioner</td>
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<td>Allied Health</td>
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<td>Foreign Languages</td>
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<td>Sociology for Transfer</td>
<td>7600</td>
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<td>Criminology, Human Services, Sociology, Food &amp; Nutrition &amp; Food Services Management</td>
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<td>Spanish for Transfer</td>
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<td>Theatre Arts</td>
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<td>Welding Technology, Automated Welding Systems</td>
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<td>Welding Technology, Metal Fabrication Option</td>
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<td>Welding Technology, Welding and Fabrication Entrepreneurship</td>
<td>8376</td>
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<td>Advanced Fabrication &amp; Transportation</td>
<td>262</td>
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<tr>
<td>Welding Technology, Welding Design and Fabrication</td>
<td>8374</td>
<td>CA</td>
<td>Advanced Fabrication &amp; Transportation</td>
<td>262</td>
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<tr>
<td>Welding Technology, Welding Multi-Process</td>
<td>8373</td>
<td>CA</td>
<td>Advanced Fabrication &amp; Transportation</td>
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<td>Women's and Gender Studies</td>
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<td>AA</td>
<td>Cultural Studies</td>
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</tbody>
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Divisions

Allied Health, Physical Education and Athletics Division

Lorraine Smith
Dean of Instruction
Division Office:
Health Sciences Building, HS-1
Phone: (559) 244-2604
Fax: (559) 499-6047
Division E-mail: apa@fresnocitycollege.edu

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

• Autism Technician
• Dental Assisting
• Dental Hygiene
• Health Information Technology
• Kinesiology
• Medical Assistant - Clinician
• Medical Coding
• Pre-Allied Health
• Public Health
• Radiologic Technology
• Registered Nursing
• Respiratory Care Practitioner

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 300, 442, and 453.

Health Care Career Programs

All students must complete the appropriate application 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 12 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 application, 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 and STEM Pathways counselor. To keep current on changes, students are expected to check the program website regularly.
Applied Technology Division

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 architecture, automotive collision repair technology, automotive technology, General Motors Technology GM ASEP/MoparCAP, computer aided drafting and design, computer aided manufacturing, construction, electrical systems technology, graphic communications, heating, ventilation, & air conditioning (HVAC), photography, and welding/metal fabrication.

Transfer college programs in architecture, automotive technology, and industrial technology are available.

Information concerning the classification of courses and other data concerning the division follows:

Certificate of Achievement

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.

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.

Career & Technology Center

Located off Fresno City College’s main campus, the Career & Technology Center offers a learning environment for practical hands-on education. Major fields of study offered by the Center include Auto Collision Repair, Emergency Medical Technician (EMT) Fire Academy, Fire Technology, Industrial Training, Maintenance Mechanics, and Manufacturing Mechanics. 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.

Values

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, Maintenance Mechanic, 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, Maintenance Mechanic; 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. Juvenile Correctional Officer Core (AJ 286) (Major #8943)
2. Post Basic Supervisor (AJ 276) (Major #8924)
3. Probation Core Course (AJ 285) (Major #8942)
4. Public Safety Dispatcher (AJ 278) (Major #8970)
5. 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)
3. Firefighter II (FIRET 22A and 22B) (Major #8835)

Certificates of Completion
A certificate of completion may be awarded after meeting the designated competencies in non-credit courses.
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 perform 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. PREREQUISITE: FIRET 1 or equivalent and FIRET 131 or equivalent with National Registry.

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>
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<tr>
<td>Basic Academy Range fee</td>
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<tr>
<td>Basic Academy Driving fee</td>
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<tr>
<td>P.C. 832 Range fee</td>
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<td>Basic Academy, Module I Driving fee</td>
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<td>Basic Academy, Module II Range fee</td>
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<td>Basic Academy, Module III Range fee</td>
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<tr>
<td>Basic Academy, Module III Driving fee</td>
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</table>

All courses conducted through the Police Academy Program have in-class registration.  
*Range fees are subject to change.*
Business Division

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 of 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 of arts degree. Occupational preparation, on the other hand, demands in-depth concentration over a like period of time culminating in an associate of 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 of Arts Degree

The associate of arts degree is offered primarily for transfer students in the area of business administration. Associate degree requirements are listed on page 39.

Associate of Science Degree

The associate of 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 39.

Certificate of Achievement

For a listing of certificate of achievement programs see page 90.

Certificates

Certificate programs are listed below. Business Administration

1. Business Finance and Accounting (ACCTG 4A, 4B; BA 35) (Major #2031)
2. Business Finance and Investments (BA 34, 35) (Major #2271)
3. Competencies for Today’s Evolving Workplace (BA 10, 33) (Major #2037)
4. Entrepreneurial Ventures (BA 10, 51, 52) (Major #2041)
5. Human Resource Management Assistant (BA 31, 33, CIT 12/15) (Major #2052)
6. Human Resource Management and Human Relations (BA 31, 33) (Major #2520)
7. Management and Supervision (BA 40, 43) (Major #2182)
8. Personal Finance and Investments (BA 30, 34) (Major #2032)
9. Professional and Civic Behaviors (BA 101, 102, 103, 104) (Major #2036)
10. Small Business Management (BA 38, 51) (Major #2030)
11. Real Estate Course Qualification (ACCTG 4A/BA18, RE 40, 41) (Major #2192)
Business and Technology
1. Bookkeeping Fundamentals (BT 24, 131) (Major #2015)
2. Business Office English (BT 5, 112) (Major #2372)
3. Business Office Math Fundamentals (BT 104, 115) (Major #2328)
4. Clerical Training (BT 370A, 370B) (Major #247V)
5. Computer Applications Software (BT 9, 10, 33, 106) (Major #2202)
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. Personal Sales (BA 33, MKTG 10, 11) (Major #2114)
3. 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.
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, theatre, and interpersonal communication.

### Associate of Arts Degree
- Art
- Art History for Transfer
- Communication Studies for Transfer
- Dance
- Journalism for Transfer
- Music for Transfer
- Music, Guitar
- Music, Instrumental
- Music, Piano
- Music, Vocal
- Studio Art for Transfer
- Theatre Arts
- Theatre Arts for Transfer

### Associate of 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*.

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.

All students enrolled in communication classes have the opportunity to participate in an intramural tournament hosted by the Forensics program.

### 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
The Fresno City College Dance program offers students the full range of dance experiences with classes ranging from classic styles such as ballet and tap to emerging styles such as hip hop. In addition to participating in courses with professional-level instruction and the opportunity to earn an associate degree, dance students may also participate in dance concerts. Specifically, original student and faculty works are staged twice a year in the fall and spring semesters. Students may also be invited to participate in the American College Dance Association and National Dance Day in the summer.

#### Theatre Arts
The Fresno City College Theatre Arts program provides students with valuable opportunities and experiences in an environment that embraces collaboration, equity, diversity, and inclusion onstage, as well as in the classroom. All stage productions utilize students in all roles including actors, technicians, crew, and designers, who then collaborate with professional staff, faculty, and guest artists. The Theatre Arts courses prepare students in the arts of fundamentals and intermediate-acting; fundamentals and intermediate scenic, costume, lighting, and make-up design and implementation; backstage crew positions; and stage management and stagecraft. During the spring semester, students have opportunities to attend the Kennedy Center American College Theatre Festival, work on a touring show focused on student outreach, and/or write, design, direct, and perform in student-produced productions.
Humanities Division

The Humanities Division offers courses which enrich students’ lives, while improving fundamental 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, Portuguese, 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.

English for Multi-Lingual Students/Linguistics

The EMLS/Linguistics Department offers two distinct programs. For English for Multi-Lingual Students needing to develop their reading, writing, grammar, and study skills, the department offers a sequential program designed to prepare students for an AA/AS degree and university transfer level courses. The department also offers non-credit, elective listening/speaking and pronunciation classes. Additionally, the department offers two 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 of 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.
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 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.

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.

Earth and Physical Science

The Earth and Physical Science Department includes Geography, Geology, Natural Science, and Physical Science. The two-year associate degree programs in Geography and Geology are primarily transfer programs.

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.

Astronomy, Engineering, and Physics

The Engineering program consists of four programs focused on Civil, Computer, Electrical, and Mechanical, Aerospace, and Manufacturing Engineering. 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.

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.

Math, Science and Engineering Web Site Addresses

Division
www.fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/index.html

Biology, Chemistry, and Mathematics
www.fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/biology.html
www.fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/chemistry.html
www.fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/mathematics.html

Sciences: Engineering, Geology, and Physics
www.fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/engineering.html
www.fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/geology.html
www.fresnocitycollege.edu/academics/divisions/math-science-and-engineering-division/physics.html
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 includes a number of programs, some of which are described below. Many courses offered satisfy transfer and associate degree general education requirements.

Anthropology

Anthropology is the field that seeks to understand humankind, from its beginnings millions of years ago up to the present day. Anthropology considers how people's behavior changes over time, and how people and seemingly dissimilar cultures are different and the same. Cultural Anthropology seeks to understand the internal logic of societies through ethnography. Archaeology retrieves artifacts from the past and places them in context to understand our history and its relevance for today. Biological Anthropology traces our biological origins, evolutionary development, and genetic diversity. Linguistic Anthropology explains the very nature of language and its use by humans. Forensic Anthropology identifies skeletal, or otherwise decomposed, human remains. Visual Anthropology documents everyday life through filmmaking. Museum Anthropology presents ethnographic and archeological collections to the public. Anthropologists can find employment in corporations, all levels of government, educational institutions, and nonprofit associations.

Child Development

The Child Development program includes courses where students can observe and work with young children firsthand. Under the supervision of qualified staff and mentor teachers, students gain practical experiences and develop confidence in their teaching skills and a sense of professionalism. Child Development faculty are actively involved in many state and local initiatives and seek grant opportunities to fund innovative projects and extend community outreach efforts. Career options include federally funded or state funded children's programs, early intervention programs, infant and toddler programs, family childcare, campus childcare programs, privately funded programs, and before- and after-school programs.

Criminology

The Criminology program prepares students for careers as a police officer, state traffic officer, federal agent, criminal investigator, correctional officer, probation officer, parole agent, crime scene investigator or criminalist. The instructors in this area are current or former county, state, and federal practitioners, retired or active law enforcement officers, prosecutors, and judges with years of experience at local, state, and federal criminal justice agencies.

Economics

Economics is the study of human behavior in a world of limited resources. It looks at how people make decisions, especially through benefit/cost analysis, and examines how incentives affect that decision-making process. Studying economics will put you on the path to understand the U.S. and global economy, analyze economic data, and make more informed choices.

Elementary Education

Get the skills and knowledge to help make a real difference in children's lives in the Elementary Education program. A certificate in Education can support you to get jobs doing paraprofessional work in transitional kindergarten through 12th grade (TK-12) classrooms and your degree can serve as a foundation for a bachelor's degree in Liberal Studies leading to a TK-12 credential program.

Cultural & Women's Studies

Cultural & Women's Studies offers students an opportunity to explore the cultural wealth embedded in minoritized communities in the United States and promote skills that advance the well-being of women and communities of color. The department consists of programs in: African American Studies, American Indian Studies, Asian American Studies, Chicano-Latino Studies, Ethnic Studies, and Women's and Gender Studies, and offers degrees and/or certificates in all of the above, in addition to degrees-for-transfer (AA-T) in Social Justice Studies.
Food Service
The Food Service program offers options in Culinary Arts and Food Service Management. The Culinary Arts program prepares students for entry-level food service positions and entry level management positions in restaurants. Students learn the basics of knife skills and cooking techniques, basic nutritional content of meals and cost controls. Degrees and certificates in Food Service Management prepare students for entry level positions as dietary aides, dietetic service supervisors, and managers in hospitals, residential care facilities, schools, and other food service establishments. All students in either program receive the training needed to sit for the ServeSafe certification.

History, Political Science, and Military Science
History and Political Science courses prepare students to ask difficult questions, learn crucial information, and develop abilities to succeed in any goal, whether that involves a local career or transfer to a major university. Help to lay the foundation for a career in education, law, government, journalism, or a number of other fields. Courses in Military Science included in the department link to the Army ROTC program at CSU Fresno.

Human Services
Degrees and certificates in Human Services prepare students for entry-level employment in a social service setting or chemical dependency counseling agencies. With additional general education courses, a student is enabled to transfer, as a junior, to a baccalaureate degree program in Social Work. A degree or certificate in the Alcohol and Drug Abuse Counseling Option meets the educational and supervised work experience requirements to become a certified Substance Use Disorders counselor in the State of California.

Psychology
In Psychology classes, you’ll learn how our brains influence behavior, how cultural and societal factors affect individual behaviors, how memories form, how personalities develop, how mental disorders are diagnosed and treated, how research data are statistically analyzed, and much more! As a psychology major, you will acquire skills and abilities that are transferable to a wide range of different occupations and make you well-suited for management and leadership roles.

Sociology
The Sociology program is designed to acquaint you with tools to understand the functioning of the society in which you live. It is the study of social life and the social causes and consequences of human behavior. Subject matter ranges from the intimate family to the hostile mob, from crime to religion, from the divisions of race and social class to the shared beliefs of a common culture. Skills learned in these courses can apply to teaching, social work, drug and alcohol counseling, police work, probation aides, juvenile hall counseling, medical work, international business, and any field that includes people from diverse backgrounds.

Career Training
As noted in the general descriptions above, career training in the Social Sciences Division includes:
- Alcohol and Drug Abuse Counseling
- 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 of science degree. Certificate programs require occupational courses only and vary between 6 and 40 units of course work. The associate of science degree mandates a minimum of 60 units, consisting of the major, electives, and required courses in general education.

Specialized Training Spaces
The Fresno City College Anthropology Museum presents exhibits about human culture drawn from both its ethnographic and archeological collections in a dedicated space. The Child Development Center (CDC) is licensed by the State of California and accredited by the National Association of the Education of Young Children (NAEYC) for children ages two through five. The CDC serves as a resource for FCC students to receive professional training and to observe children in a quality program.
District Courses and Programs

Fresno City College is a sister institution of Madera Community College, 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 other college campuses:

- Administration of Justice
- Aerospace Studies
- Allied Health
- American Studies
- American Indian Studies
- Applied Technology
- Architecture
- Armenian
- Asian-American Studies
- Automotive Collision Repair Technology
- Automotive Technology General Motors ASEP
- Business & Technology
- Chinese
- Computer Aided Drafting and Design
- Computer Aided Manufacturing
- Construction
- Decision Science
- Dental Hygiene
- Drafting
- Electrical Systems Technology
- Ethnic Studies
- Fire Academy
- Fire Technology
- German
- Global Studies
- Graphic Communications
- Health Information Technology
- Heating, Ventilation, and Air Conditioning
- Hmong
- Humanities
- Japanese
- Marketing
- Military Science
- Network Security/Computer Technician
- Paralegal
- Police Academy
- Portuguese
- Real Estate
- Radiologic Technology
- Respiratory Care
- Welding Technology

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
- 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) 265-5700
Reedley College

Additional programs/courses available only at Reedley College:
• Aeronautics
• Agri-Business
• Forest/Park Technology
• General Agriculture
• Landscape Horticulture

Further information on these programs/courses can be obtained by writing or calling:
Reedley College
995 North Reed Avenue
Reedley, CA 93654
(559) 494-3000

Madera Community College

Madera Community College is located on Avenue 12 just east of Highway 99 south of the City of Madera. The college offers a wide variety of academic and occupational programs and opportunities for students.

Additional program/courses available only at Madera Community College:
• Speech Language Pathology Assistant

Further information on this program/courses can be obtained by writing or calling:
Madera Community College
30277 Avenue 12
Madera, CA 93638
(559) 675-4800

Madera Community College at Oakhurst

Madera Community College at Oakhurst 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.

Madera Community College at Oakhurst
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.

Additional program/courses available only at Clovis Community College:
• Occupational Therapy Assistant

Further information on this program/courses can be obtained by writing or calling:
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://www.icangotocollege.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 SCIENCE FOR TRANSFER – MAJOR #8400

The Associate in Science in Public Health Science 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 Science 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 Science Associate in Science for Transfer provides preparedness in these job related career paths. To earn the Associate in Science in Public Health Science 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>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHLTH 1</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 5</td>
<td>Human Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy, and Human Physiology, or</td>
<td></td>
</tr>
<tr>
<td>BIOL 22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>Human Anatomy &amp; Physiology I, and</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3A</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 1</td>
<td>Contemporary Health Issue</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSY 2</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>
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. 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) Obtaining 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/H</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 5</td>
<td>Introduction to the Study of Archaeology</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 the 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 MATH 11</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>AFRAM 5</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>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>ETHNST 10</td>
<td>Introduction to Ethnic 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>

Total 18-25
ART

ART HISTORY FOR TRANSFER — MAJOR #5206

The Associate in Arts in Art History for Transfer Degree offers a core foundation for the study of art history across cultures and eras. The program prepares students to continue their studies towards a degree in art history or studio arts at the California State University (CSU) and the University of California (UC) systems. Students will learn skills of analyzing art within its historical and cultural context using art-specific terminology and methodologies. To earn the Associate in Arts in Art History 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 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. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Analyze a variety of techniques and formal visual elements of individual works of art in different media and diverse cultures.
2. Define and differentiate various styles of art throughout history.
3. Evaluate works of art in relation to context, historical background, and influence on subsequent artistic periods.
4. Compare stylistic elements that distinguish aesthetic and cultural trends.

REQUIRED CORE

<table>
<thead>
<tr>
<th>Units</th>
<th>Art History Ancient to Medieval, or Honors Art History Ancient to Medieval</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>Art History Renaissance to Modern, or Honors Art History Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST A: Select one of the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Introduction to Asian Art</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>Art of the Ancient Americas</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST B: Select one of the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Two-Dimensional Design</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>Three-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning Figure Drawing and Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning Painting: Oil/Acrylic</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Introduction to Digital Art/New Media</td>
<td>3</td>
</tr>
</tbody>
</table>

List A or List B not already taken:

<table>
<thead>
<tr>
<th>Units</th>
<th>African-American Art</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>American Indian Art</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Archaeology and World Prehistory</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>History of Architecture I</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>History of Architecture II</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Modern and Contemporary Art</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Chicano Art</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Introduction to Film Studies</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Film and Culture</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning French</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>High-Beginning French</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning German</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>High-Beginning German</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>Classical Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Modern Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Theories of Knowledge and Reality</td>
<td>3</td>
</tr>
<tr>
<td>Units</td>
<td>Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>High-Beginning Spanish</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>Intermediate Spanish</td>
<td>5</td>
</tr>
<tr>
<td>Units</td>
<td>High-Intermediate Spanish</td>
<td>5</td>
</tr>
</tbody>
</table>

Total 18-20

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 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</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 6/6H</td>
<td>Art History Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>ART 7</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST A: Select One (3 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 5/5H</td>
<td>Art History Ancient to Medieval</td>
<td>3</td>
</tr>
<tr>
<td>*ART 7</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST B: Select three courses (9 units)

Select one course from three of the following areas (Drawing, Painting, Printmaking, Ceramics, Sculpture, or Applied Design)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 8</td>
<td>Beginning Figure Drawing and Anatomy</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 9</td>
<td>Beginning Painting: Oil/Acrylic</td>
<td>3</td>
</tr>
<tr>
<td>ART 13</td>
<td>Beginning Watercolor Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 19</td>
<td>Intermediate Painting: Oil/Acrylic</td>
<td>3</td>
</tr>
<tr>
<td>ART 29</td>
<td>Advanced Painting: Oil/Acrylic</td>
<td>3</td>
</tr>
<tr>
<td>ART 14</td>
<td>Beginning Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 24A</td>
<td>Intaglio Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 24B</td>
<td>Lithograph Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 24C</td>
<td>Relief Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 24D</td>
<td>Screenprinting</td>
<td>3</td>
</tr>
<tr>
<td>ART 10</td>
<td>Beginning Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 20</td>
<td>Intermediate Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 11</td>
<td>Beginning Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 15</td>
<td>Ceramic Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 21</td>
<td>Intermediate 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 22B</td>
<td>Craft Workshop: Concepts in Fibers</td>
<td>3</td>
</tr>
<tr>
<td>ART 32A</td>
<td>Beginning Jewelry and Metalsmithing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 24

*BART 3, ART 4, and ART 7 should be taken before the other courses in the major.
CHICANO-LATINO STUDIES

SOCIAL JUSTICE STUDIES, CHICANO STUDIES FOR TRANSFER — MAJOR #7662

Social Justice Studies was created as an “Area of Emphasis” Associates Degree for Transfer (ADT). This ADT includes Programs in Cultural or Ethnic Studies and Women's Studies, and is designed to give students a broad background in the histories of various racial and ethnic groups, and the contemporary challenges faced by these groups in our society. Social Justice is the basic principle that all members of a society are entitled to equal rights and opportunities, and Social Justice Studies seeks to examine existing inequities, particularly as they relate to race, ethnicity, gender, and sexuality. The Social Justice Studies ADT in Chicano Studies is designed to transfer into the CSU system, and can be used as the foundation for a Bachelor's Degree in the following areas: American Studies, Chicana and Chicano or Mexican American Studies, and Comparative Ethnic Studies. To earn the Associate in Arts in Social Justice 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 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. Demonstrate academic preparedness for transfer to a four-year college.
2. Examine and appraise the intersections of race, class, gender, religion and other cultural indicators in issues of social justice in the United States.
3. Compare and contrast the primary goals of social justice movements of the 20th century and evaluate correlations to contemporary social justice movements.
4. Demonstrate critical thinking and problem solving skills across disciplines as they relate to the Chicano-Latino community.
5. Acquire a comprehensive knowledge and understanding of Chicano-Latino history, culture, arts, and socio-political issues.
6. 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>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
<tr>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
</tbody>
</table>
Select three (3) courses from at least two of the following areas:

**Area 1: History or Government**
- CLS 29 History of Mexico, Colonial to Contemporary Period ................................................................. 3

**Area 2: Arts and Humanities**
- CLS 20 Chicano Art .................................................................................................................. 3
- CLS 21 Chicano Literature .......................................................................................................... 3

**Area 3: Social Science**
- CLS 12A Mexican American History: From Mesoamerica to the Mexican American War .......... 3
- CLS 12B Mexican American History: From the Mexican-American War to the Present .......... 3
- CLS 30 Migration and the Family: Social and Psychological Perspectives ...................................... 3

**Area 4: Major Preparation**
- CLS 13 Politics and the Chicano-Latino Community ................................................................. 3
- CLS 14 Sociology of the Mexican American Community .......................................................... 3

Total 24

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**COMMUNICATION STUDIES 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 8/8H</td>
<td>Group Communication, or Honors Group Communication</td>
<td>3</td>
</tr>
</tbody>
</table>
COMM 10 \hspace{1.5cm} Intercultural Communication \hspace{1.5cm} 3
COMM 25 \hspace{1.5cm} Argumentation \hspace{1.5cm} 3

Choose 3 units from the following: Units
COMM 4 \hspace{1.5cm} Persuasion \hspace{1.5cm} 3
COMM 26 \hspace{1.5cm} Intercollegiate Forensics Laboratory \hspace{1.5cm} 1-3

\textbf{Total} \hspace{1.5cm} 18

\section*{CRIMINOLOGY}

\section*{ADMINISTRATION OF JUSTICE FOR TRANSFER \hspace{1.5cm} MAJOR \#7750}

\begin{itemize}
\item Administration of justice is the study of the causes, consequences, and control of crime. The program leading to the Associate in Science in 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.

\textbf{ASSOCIATE IN SCIENCE DEGREE}

\textit{Student Learning Outcomes:}
\begin{enumerate}
\item Reflect critically on developments in criminal justice policy and the relationship of those policies to the wider political and social environment.
\item Compare and evaluate diverse and competing arguments in disciplinary (justice system) and interdisciplinary contexts.
\item Demonstrate knowledge of the history, structure and processes of law enforcement, the judicial system, the correctional system, and juvenile justice system.
\item Define and utilize key terms, concepts, and theories in the criminal justice system.
\item Interpret, assess, and compare competing types of evidence and data.
\item Effectively communicate orally and in writing the results of their analysis and conclusions.
\end{enumerate}

\textbf{REQUIRED CORE Units}

\begin{itemize}
\item CRIM 1 \hspace{1.5cm} Introduction to Criminology \hspace{1.5cm} 3
\item CRIM 6 \hspace{1.5cm} Concepts of Criminal Law \hspace{1.5cm} 3
\item Select two courses from the following: Units
\item CRIM 3 \hspace{1.5cm} Legal Aspects of Evidence \hspace{1.5cm} 3
\item CRIM 4 \hspace{1.5cm} Principles & Procedures of the Justice System \hspace{1.5cm} 3
\item CRIM 5 \hspace{1.5cm} Community Relations \hspace{1.5cm} 3
\item CRIM 8 \hspace{1.5cm} Criminal Investigation \hspace{1.5cm} 4
\item CRIM 9 \hspace{1.5cm} Crime Scene Forensic Evidence \hspace{1.5cm} 3
\item CRIM 11 \hspace{1.5cm} Juvenile Delinquency \hspace{1.5cm} 3
\item CRIM 20 \hspace{1.5cm} Introduction to Corrections \hspace{1.5cm} 3
\item Select two courses from the following: Units
\item CRIM 13 \hspace{1.5cm} The Constitution and Your Individual Rights \hspace{1.5cm} 3
\item MATH/PSY 42 \hspace{1.5cm} Statistics for the Behavioral Sciences, or
\item MATH 11 \hspace{1.5cm} Elementary Statistics \hspace{1.5cm} 4
\item PSY 2/2H \hspace{1.5cm} General Psychology, or
\item Honors General Psychology \hspace{1.5cm} 3
\item SOC 1A/1AH \hspace{1.5cm} Introduction to Sociology, or
\item Honors Introduction to Sociology \hspace{1.5cm} 3
\end{itemize}

\textbf{Total} \hspace{1.5cm} 18-20

\section*{CULTURAL STUDIES}

\section*{SOCIAL JUSTICE STUDIES, GENERAL FOR TRANSFER \hspace{1.5cm} MAJOR \#7663}

Social Justice Studies was created as an "Area of Emphasis" Associate Degree for Transfer (ADT). This ADT includes Programs in Cultural or Ethnic Studies and Women's Studies, and is designed to give students a broad background in the histories of various racial and ethnic groups, and the contemporary challenges faced by these groups in our society. Social Justice Studies seeks to examine existing inequities, particularly as they relate to race, ethnicity, gender, and sexuality. The Social Justice Studies ADT is designed to transfer into the CSU system, and can be used as the foundation for a Bachelor's Degree in the following areas: American Indian Studies, African American or Africana Studies, American Studies, Asian American Studies, Chicana and Chicano or Mexican American Studies, Comparative Ethnic Studies, Gender Studies, Women's Studies, Labor Studies, and some Sociology Programs. To earn the Associate in Arts in Social Justice 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 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. Demonstrate academic preparedness for transfer to a four-year college.
2. Examine and appraise the intersections of race, class, gender, religion and other cultural indicators in issues of social justice in the United States.
3. Compare and contrast the primary goals of social justice movements of the 20th century and evaluate correlations to contemporary social justice movements.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>Introduction to African American Studies, or AMIND 31</td>
</tr>
<tr>
<td>ASAMER 15</td>
<td>Introduction to Asian-Americans, or ETHNST 10</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
</tr>
</tbody>
</table>

Select three (3) courses from at least two of the following areas:

**Area 1: History or Government**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 4</td>
<td>Classical and Pre Colonial Africa</td>
</tr>
<tr>
<td>AFRAM 34</td>
<td>History of the American Civil Rights Movement</td>
</tr>
<tr>
<td>AMST 11</td>
<td>Law and Democracy</td>
</tr>
<tr>
<td>CLS 29</td>
<td>History Of Mexico, Colonial to Contemporary Period</td>
</tr>
</tbody>
</table>

**Area 2: Arts and Humanities**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 3</td>
<td>African-American Art</td>
</tr>
<tr>
<td>AFRAM 8</td>
<td>African-American Creative Workshop</td>
</tr>
<tr>
<td>AFRAM 15</td>
<td>African American Music</td>
</tr>
<tr>
<td>AMIND 35</td>
<td>American Indian Art</td>
</tr>
<tr>
<td>ASAMER 8</td>
<td>Chinese Culture</td>
</tr>
<tr>
<td>CLS 17A</td>
<td>Beginning Mexican Folk Dance</td>
</tr>
<tr>
<td>CLS 20</td>
<td>Chicano Art</td>
</tr>
<tr>
<td>CLS 21</td>
<td>Chicano Literature</td>
</tr>
<tr>
<td>CLS 22</td>
<td>Art of the Ancient Americas</td>
</tr>
<tr>
<td>CLS 27B</td>
<td>Advanced Mexican Folk Dance</td>
</tr>
<tr>
<td>WSTS 36</td>
<td>Women's Literature</td>
</tr>
</tbody>
</table>

**Area 3: Social Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIND 31</td>
<td>American Indian Culture</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>The American Indian in Contemporary Society</td>
</tr>
<tr>
<td>ASAMER 1</td>
<td>Indo-Chinese Americans</td>
</tr>
<tr>
<td>ASAMER 15</td>
<td>Introduction to Asian-Americans</td>
</tr>
<tr>
<td>CLS 12A</td>
<td>Mexican American History: From Mesoamerica to the Mexican American War</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.

**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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 40/40H</td>
<td>Introduction to Microeconomics, or Honors Introduction to Microeconomics</td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or Honors Introduction to Macroeconomics</td>
</tr>
<tr>
<td>MATH 5A</td>
<td>Mathematical Analysis I</td>
</tr>
<tr>
<td>MATH 42</td>
<td>Statistics for the Behavioral Sciences, or Elementary Statistics, or</td>
</tr>
<tr>
<td>MATH 11</td>
<td></td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
</tr>
</tbody>
</table>
Choose two of the following courses: ......................... Units  
ACCTG 4A  Financial Accounting  ......................... 4  
ACCTG 4B  Managerial Accounting  ......................... 4  
MATH 5B  Mathematical Analysis II  ......................... 4  
MATH 6  Mathematical Analysis III  ......................... 4  
MATH 21  Finite Mathematics  ......................... 3  
MATH 26  Elementary Linear Algebra  ......................... 3  

Total 20-23

EDUCATION

ELEMENTARY 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. 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>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 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>3</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 Honors American Government</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3/3H</td>
<td>Critical Reading &amp; Writing, or Honors Critical Reading &amp; Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2/2H</td>
<td>Critical Reasoning and Analytic Writing, or Honors Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
<tr>
<td>ART 5/5H</td>
<td>Art History Ancient to Medieval, or Honors Art History Ancient to Medieval</td>
<td>3</td>
</tr>
<tr>
<td>ART 6/6H</td>
<td>Art History Renaissance to Modern, or 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>
<tr>
<td>ART 17</td>
<td>Middle Eastern Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART/ASAMER 55</td>
<td>Introduction to Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>CLS 21</td>
<td>Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>COMM/TA 12</td>
<td>Fundamentals of Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1</td>
<td>Western Civilization to 1648</td>
<td>3</td>
</tr>
<tr>
<td>MUS 3</td>
<td>Music Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MUS 13</td>
<td>History of Music</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 56
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.

MAJOR CORE

ENGL 1B Introduction to the Study of Literature .................. 3
ENGL 3 Critical Reading and Writing ................................. 3

MAJOR COURSE OPTIONS - Section A

Select one of the course sequences (6 units total) from the following list:

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........................................ 6

ENGL 46A English Literature to 1800, and
ENGL 48A Introduction to American Literature to 1865, and
ENGL 48B Introduction to American Literature 1865 to the Present........................................ 6

Select either six (6) units 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/T/AC 15C Creative Writing: Playwriting................... 3
ENGL/AFRAM 17 African-American Literature.................... 3
ENGL 20 Asian American Literature ............................... 3
ENGL/HUM 42 Classic Myths ......................................... 3
ENGL 44A Survey of World Literature to the Mid-Seventeenth Century................................. 3
ENGL 44B Survey of World Literature from Mid-Seventeenth Century to 1950......................... 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

SECTION C

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

Total 18
GEOGRAPHY FOR TRANSFER – MAJOR #6072

An Associate in Geography for transfer is designed for students planning to complete a bachelor’s degree in Geography at a CSU. Geography explores Earth’s landscapes and the physical processes shaping them as well as human relationships with the environment. Geographic inquiry bridges the Social and Natural sciences, and is rooted in spatial analysis of phenomena. Within geography there are a number of sub-disciplines, ranging from climatology and geomorphology to the study of human cultures, migrations, economies, and urban environments. Geographers study the interaction of people with the natural environment, as well as the impacts of people and their activities shape, and are in turn shaped, by the natural environment. Cultural Geography focuses on the spatial organization of the societies at scales ranging from the local to the global, utilizing different time scales. Geographic analysis, particularly through the use of Geographic Information Systems (GIS), is used to address a wide range of issues and problems of the modern world. The Associate in Geography is composed of a core set of introductory Geography courses that assist students in developing critical thinking and spatial analysis skills. It also provides students with a solid foundation for pursuing further study in related majors. To earn the Associate in Geography degree for transfer, students must complete (60) required semester units of CSU-transferable coursework, 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. 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. Define and provide examples of basic geographical concepts in physical and human geography. (For example: plate tectonics, culture hearths and diffusion.)
2. Describe physical processes by which surface features are formed and shaped, (e.g. climate, landforms) and human geography (e.g. religion; population).
3. Explain how geographical factors have shaped historical and current patterns of physical and human geography. (For example, how plate tectonics influences the location and shape of the continents, or how environment and economics have influenced migration and settlement patterns)

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1</td>
<td>Physical Geography</td>
<td>4</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>
</tbody>
</table>

LIST A: Select Two Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 8</td>
<td>Physical Geography: Weather and Climate</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 20</td>
<td>Geography of California</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 19-20

GEOL 1     | Introduction to Geology                    | 4     |
GEOL 2     | Physical Geology                           | 3     |
GEOL 2L    | Historical Geology                         | 1     |
MATH 5A    | Mathematical Analysis I                    | 5     |
MATH 5B    | Mathematical Analysis II                   | 4     |

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)

GEOLGY 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>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 I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 5B</td>
<td>Mathematical Analysis II</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 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>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>GLST 1 Introduction to Global Studies</td>
</tr>
<tr>
<td>3</td>
<td>GLST 2 Global Issues</td>
</tr>
</tbody>
</table>

List A: Select five courses from at least four of the following areas.

Area 1: Culture and Society

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ANTHRO 2 Cultural Anthropology</td>
</tr>
<tr>
<td>3</td>
<td>HIST 23 World History II, since 1500</td>
</tr>
</tbody>
</table>

Area 2: Geography

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>GEOG 1 Physical Geography</td>
</tr>
<tr>
<td>3</td>
<td>GEOG 2 Cultural Geography</td>
</tr>
<tr>
<td>6</td>
<td>GEOG 4A World Geography, and GEOG 4B World Geography</td>
</tr>
</tbody>
</table>

Area 3: Economics

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics</td>
</tr>
<tr>
<td></td>
<td>ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics</td>
</tr>
</tbody>
</table>

Area 4: Politics

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>POLSCI 5 Comparative Government</td>
</tr>
<tr>
<td>3</td>
<td>POLSCI 24 International Relations</td>
</tr>
</tbody>
</table>

Total 21-26

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

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HIST 11 History of the United States to 1877</td>
</tr>
<tr>
<td>3</td>
<td>HIST 12 History of the United States since 1877</td>
</tr>
</tbody>
</table>

LIST A - Select one of the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HIST 1 Western Civilization to 1648</td>
</tr>
<tr>
<td>3</td>
<td>HIST 2 World History I, to 1600</td>
</tr>
<tr>
<td>3</td>
<td>HIST 20 World History I, to 1600</td>
</tr>
</tbody>
</table>

LIST B - Select one of the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HIST 2 Western Civilization since 1648</td>
</tr>
<tr>
<td>3</td>
<td>HIST 23 World History II, since 1500</td>
</tr>
</tbody>
</table>

Total 21-26
HUMAN SERVICES

SOCIAL WORK AND HUMAN SERVICES FOR TRANSFER – MAJOR #7635

An Associate in Arts in Social Work and Human Services for Transfer degree, is designed for students who plan to complete a Bachelor's degree in a similar major at a CSU campus. The degree will acquaint students with the fundamentals of the human services system and the profession of Social Work, including introduction to the theories, principles, and values on which human services are offered and social work is practiced in the United States. To earn the Associate of Arts in Social Work/Human Services 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 necessary to complete the transfer degree. Students should consult with a knowledgeable academic counselor for more information on transfer requirements and university admission.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Demonstrate a fundamental working knowledge of the social services system and social work as a profession.
2. Be prepared for entry level employment in a social services setting.
3. Apply the multiple perspectives of a broad liberal arts foundation to understanding and responding to human needs and social problems.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20 Human Anatomy, or</td>
</tr>
<tr>
<td>BIOL 22 Human Physiology, or</td>
</tr>
<tr>
<td>BIOL 21A Human Anatomy &amp; Physiology I, and</td>
</tr>
<tr>
<td>BIOL 21B Human Anatomy &amp; Physiology II ..........</td>
</tr>
<tr>
<td>ECON 40/40H Introduction to Microeconomics, or</td>
</tr>
<tr>
<td>Honors Introduction to Microeconomics, or</td>
</tr>
<tr>
<td>ECON 50/50H Introduction to Macroeconomics, or</td>
</tr>
<tr>
<td>Honors Introduction to Macroeconomics ..........</td>
</tr>
<tr>
<td>HS 19A Work Experience (Cooperative), Occupational ....</td>
</tr>
<tr>
<td>HS 20 Introduction to Social Welfare ...............</td>
</tr>
<tr>
<td>MATH 11 Elementary Statistics, or</td>
</tr>
<tr>
<td>MATH 42 Statistics for the Behavioral Sciences ........</td>
</tr>
<tr>
<td>PSY 2/2H General Psychology, or</td>
</tr>
<tr>
<td>Honors General Psychology .........................</td>
</tr>
<tr>
<td>SOC 1A/AH Introduction to Sociology, or</td>
</tr>
<tr>
<td>Honors Introduction to Sociology ...................</td>
</tr>
<tr>
<td>TOTAL 29-34</td>
</tr>
</tbody>
</table>

LIST A - Select two (2) courses:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2/2H Cultural Anthropology, or</td>
</tr>
<tr>
<td>Honors Cultural Anthropology ......................</td>
</tr>
<tr>
<td>CHDEV 30 Child, Family and Community .............</td>
</tr>
<tr>
<td>CHDEV/PSY 38 Lifespan Development ..................</td>
</tr>
<tr>
<td>CHDEV/PSY 39 Child Growth and Development ..........</td>
</tr>
<tr>
<td>CRIM 1 Introduction to Criminology ................</td>
</tr>
<tr>
<td>ENGL 3/3H Critical Reading &amp; Writing, or</td>
</tr>
<tr>
<td>Honors Critical Reading &amp; Writing ..................</td>
</tr>
<tr>
<td>PSY 16 Abnormal Psychology .......................</td>
</tr>
<tr>
<td>SOC 1B Critical Thinking about Social Problems ....</td>
</tr>
<tr>
<td>SOC 2 American Minority Groups .....................</td>
</tr>
<tr>
<td>TOTAL 29-34</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 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.

**CORE COURSES (3 courses or 9 units):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
<tr>
<td>JOURN 11A</td>
<td>Beginning Media Writing Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST A - Select 3 units or 1 course from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN 11B</td>
<td>Intermediate Media Writing Practicum</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 11C</td>
<td>Advanced Media Writing Practicum</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 11D</td>
<td>Editorial Leadership</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 14</td>
<td>Multimedia Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST B - Select 6-7 units or 2 courses from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 25</td>
<td>Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3/3H</td>
<td>Critical Reading &amp; Writing, or Honors Critical Reading &amp; Writing</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>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 16</td>
<td>Race, Gender and the Media</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, or</td>
<td>3-4</td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td></td>
</tr>
<tr>
<td>PHIL 6</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2/2H</td>
<td>American Government, or Honors American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 18-19

*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.*

## 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>Course Code</th>
<th>Course 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>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>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
**Kinesiology**

**ELECTIVES: 3 units**
Select a minimum of 1 course 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>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 21-23**

---

**LAW, PUBLIC POLICY, AND SOCIETY FOR TRANSFER – MAJOR #8770**

The coursework required to earn an Associate in Arts in Law, Public Policy, and Society for Transfer has been identified as good preparation for law school upon completion of a bachelor's degree. This interdisciplinary area of emphasis emphasizes the development of communication skills, introduces students to the legal field, and prepares students for further study in a variety of majors. Students who opt to pursue this course of study are encouraged to engage in further exploration of one or more specific majors as they select electives for degree completion. To earn the Associate in Arts in Law, Public Policy and Society 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 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. Demonstrate independent and critical thinking regarding important topics in law.
2. Demonstrate independent and critical thinking regarding important topics in law.

**REQUIRED 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, or</td>
<td></td>
</tr>
<tr>
<td>ENGL 3/3H</td>
<td>Critical Reading &amp; Writing, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 2/2H</td>
<td>Critical Reasoning and Analytic Writing, or</td>
<td></td>
</tr>
<tr>
<td>CRIM 6</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>Reading and Composition, or</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 21-23**

---

**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, which can be selected from the following courses. 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 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 solve problems such as probability density functions.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 11/11H</td>
<td>Elementary Statistics, or</td>
<td></td>
</tr>
<tr>
<td>MATH 42</td>
<td>Honors Elementary Statistics, or</td>
<td></td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td>3-4</td>
</tr>
<tr>
<td>HIST 11</td>
<td>History of the United States to 1877, or</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>PHIL 1C</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2/2H</td>
<td>American Government, or</td>
<td></td>
</tr>
</tbody>
</table>

**Total 32-33**

---

2022-2023 Fresno City College Catalog
GROUP A: Select a minimum of seven units from Groups A or B with at least three units from Group A.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 11/11H</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 17</td>
<td>5</td>
</tr>
<tr>
<td>MATH 26</td>
<td>3</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>MATH 7</td>
<td>4</td>
</tr>
<tr>
<td>MATH 17</td>
<td>5</td>
</tr>
<tr>
<td>MATH 26</td>
<td>3</td>
</tr>
</tbody>
</table>

For the Large Ensemble requirement, all music majors select four units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 20</td>
<td>1</td>
</tr>
<tr>
<td>MUS 21</td>
<td>1</td>
</tr>
<tr>
<td>MUS 22</td>
<td>1</td>
</tr>
<tr>
<td>MUS 23</td>
<td>1</td>
</tr>
</tbody>
</table>

Required Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1A Music Theory I, or</td>
<td>3</td>
</tr>
<tr>
<td>MUS 1AE Music Theory I-Extra</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2A Music Theory II, or</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2B Music Theory III, or</td>
<td>3</td>
</tr>
<tr>
<td>MUS 7A Music Theory IV, or</td>
<td>3</td>
</tr>
<tr>
<td>MUS 7B Ear Training I, or</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7C Ear Training: Level II, or</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7D Ear Training: Level III, or</td>
<td>1</td>
</tr>
</tbody>
</table>

Two Units of Intermediate/Advanced class requirement to be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 20 Intermediate/Advanced Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUS 21 Intermediate/Advanced Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUS 22 Intermediate/Advanced Guitar</td>
<td>1</td>
</tr>
<tr>
<td>MUS 23 Intermediate/Advanced Strings (String Orchestra)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 24 Intermediate/Advanced Percussion (Percussion Ensemble)</td>
<td>1</td>
</tr>
</tbody>
</table>

Student Learning Outcomes:
1. Audiate, analyze, read, and write music.
2. Perform music of at least three different time periods.
3. Perform in solo and ensemble settings.

NUTRITION AND DIETETICS FOR TRANSFER – MAJOR #683

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 Associate 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 31</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1A/1B</td>
<td>6</td>
</tr>
<tr>
<td>FN 40</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2</td>
<td>3</td>
</tr>
</tbody>
</table>

List A: Select at least one course from the list below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 28A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 29A</td>
<td>5</td>
</tr>
<tr>
<td>MATH 11</td>
<td>5</td>
</tr>
<tr>
<td>MATH/PSY 42</td>
<td>3-4</td>
</tr>
<tr>
<td>DS 23</td>
<td>3</td>
</tr>
</tbody>
</table>

List B: Select one course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 27-33

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 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 1A/1AH</td>
<td></td>
</tr>
<tr>
<td>PHIL 1C/1CH</td>
<td></td>
</tr>
<tr>
<td>PHIL 6</td>
<td></td>
</tr>
</tbody>
</table>

Select three of the following courses (min. two PHIL):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN 10</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN 11</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1B</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2/2H</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3A</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3B</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18

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.

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>

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. 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLSCI 2/2H</td>
<td>American Government, or Honors American Government</td>
</tr>
</tbody>
</table>

LIST A: Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH/PSY 42</td>
<td></td>
</tr>
<tr>
<td>MATH 11</td>
<td>4</td>
</tr>
<tr>
<td>POLSCI 1</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 3</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 5</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 24</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST B: Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 20</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40</td>
<td>3</td>
</tr>
<tr>
<td>ECON 50</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 13</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1B</td>
<td>3</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 COURSE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2/2H</td>
<td>General Psychology, or Honors General Psychology</td>
</tr>
<tr>
<td>PSY 36</td>
<td>Biological Psychology</td>
</tr>
<tr>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences, or MATH 11/11H</td>
</tr>
<tr>
<td>PSY 45</td>
<td>Introduction to Research Methods in Psychology</td>
</tr>
</tbody>
</table>

**Select one of the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 5</td>
<td>Human Biology</td>
</tr>
<tr>
<td>PSY 5</td>
<td>Social Psychology</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

**Choose one of the following courses:**

<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 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>

**Total 19-20**

### 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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 5</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences, or MATH 11</td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td>Introduction to Sociology, or Honors Introduction to Sociology</td>
</tr>
<tr>
<td>SOC 1B</td>
<td>Critical Thinking about Social Problems</td>
</tr>
<tr>
<td>SOC 32</td>
<td>Introduction to Marriage and Family</td>
</tr>
</tbody>
</table>

**Choose one of the following 3-unit courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or Honors Cultural Anthropology</td>
</tr>
<tr>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Minority Groups</td>
</tr>
<tr>
<td>SOC/WSTS 5</td>
<td>Sociology of Rape</td>
</tr>
<tr>
<td>SOC/WSTS 7</td>
<td>Domestic Violence: Abuse within the Family</td>
</tr>
<tr>
<td>SOC/HIS 10</td>
<td>Introduction to Aging Studies</td>
</tr>
<tr>
<td>SOC/CLS 14</td>
<td>Sociology of the Mexican American Community</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
</tr>
</tbody>
</table>

### 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.
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.

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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 2</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 3NS</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 4NS</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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 5</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 6</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 7</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 8</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 9</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 41</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 42</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 24

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>3</td>
</tr>
<tr>
<td>TA 31</td>
<td>3</td>
</tr>
<tr>
<td>TA 40</td>
<td>3</td>
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<tr>
<td>TA 23</td>
<td>3</td>
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<tr>
<td>TA 41</td>
<td>3</td>
</tr>
<tr>
<td>TA 42</td>
<td>3</td>
</tr>
<tr>
<td>TA 25</td>
<td>3</td>
</tr>
<tr>
<td>TA 27B</td>
<td>3</td>
</tr>
<tr>
<td>TA 28</td>
<td>3</td>
</tr>
<tr>
<td>TA 36</td>
<td>3</td>
</tr>
<tr>
<td>TA 38</td>
<td>3</td>
</tr>
<tr>
<td>TA 40</td>
<td>3</td>
</tr>
<tr>
<td>TA 43</td>
<td>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>
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<tr>
<td>TA 27B</td>
<td>3</td>
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<tr>
<td>TA 28</td>
<td>3</td>
</tr>
<tr>
<td>TA 36</td>
<td>3</td>
</tr>
<tr>
<td>TA 38</td>
<td>3</td>
</tr>
<tr>
<td>TA 40</td>
<td>3</td>
</tr>
<tr>
<td>TA 43</td>
<td>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.

Total 24
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 OF 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  Units
*ACCTG 4A  Financial Accounting ........................................ 4
*ACCTG 4B  Managerial Accounting ........................................ 4
ACCTG 19  Work Experience (Cooperative), Occupational ...... 1
*ACCTG 51  Intermediate Accounting .................................... 3
*ACCTG 52  Cost Accounting .................................................. 3
ACCTG 70  QuickBooks Fundamentals, or
ACCTG 73  Sage 100 Fundamentals...................................... 3
BA 10  Introduction to Business ...................................... 3
CIT 15  Computer Concepts ............................................. 3
CIT 23  Spreadsheet Fundamentals, or
BT 24  Beginning Excel .................................................. 1-2

Select 3 of the following courses: (ACCTG 70 and ACCTG 73 can only be used if not taken above) Units
*ACCTG 53  Tax Accounting .................................................. 3
*ACCTG 54A  Principles of Auditing ....................................... 3
*ACCTG 56  Payroll Accounting ........................................... 3

*ACCTG 57  Governmental Accounting ................................. 3
*ACCTG 61  Forensics Accounting ........................................... 3
ACCTG 70  QuickBooks Fundamentals ................................... 3
ACCTG 73  Sage 100 Fundamentals ...................................... 3

Total 34-35

*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 39.

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  Units
*ACCTG 4A  Financial Accounting ........................................ 4
*ACCTG 4B  Managerial Accounting ........................................ 4
ACCTG 19  Work Experience (Cooperative), Occupational ...... 1
*ACCTG 51  Intermediate Accounting .................................... 3
*ACCTG 52  Cost Accounting .................................................. 3
ACCTG 70  QuickBooks Fundamentals, or
ACCTG 73  Sage 100 Fundamentals...................................... 3
BA 10  Introduction to Business ...................................... 3
CIT 15  Computer Concepts ............................................. 3
CIT 23  Spreadsheet Fundamentals, or
BT 24  Beginning Excel .................................................. 1-2
Select 3 of the following courses: (ACCTG 70 and ACCTG 73 can only be used if not taken above)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 53</td>
<td>Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 54A</td>
<td>Principles of Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 56</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 57</td>
<td>Governmental Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 61</td>
<td>Forensics Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>QuickBooks Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 73</td>
<td>Sage 100 Fundamentals</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 34-35

*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>
<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 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 56</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>QuickBooks Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 73</td>
<td>Sage 100 Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIT 23</td>
<td>Spreadsheet Fundamentals, or</td>
<td>1-2</td>
</tr>
<tr>
<td>BT 24</td>
<td>Beginning Excel</td>
<td></td>
</tr>
</tbody>
</table>

Total 17-18

ADMINISTRATION OF JUSTICE

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

AJ 270A Basic Police Academy – Part 1 .......................... 19.5
AJ 270B Basic Police Academy – Part 2 .......................... 17.5
Total 37
OR
AJ 272 Regular Basic Course Module III......................... 7
AJ 273 Regular Basic Course Module II........................... 8
AJ 274 Regular Basic Course Module I....................... 21.5
Total 36.5

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. Identify the characteristics of the profession of the Juvenile Correctional Officer.
3. Describe the procedures a Juvenile Correctional Officer must perform from arrest to disposition of a juvenile offender.

REQUIRED COURSE

AJ 286 Juvenile Correctional Officer Core ..................... 8.5

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

AJ 278 Public Safety Dispatcher ...................................... 7

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
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 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 OF 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

REQUIRED CORE COURSES: 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 Adaptation</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 3</td>
<td>African-American Art</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 15</td>
<td>African American Music</td>
<td>3</td>
</tr>
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</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>AFRAM 4</td>
<td>Classical and Pre Colonial Africa</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 5</td>
<td>The African Diaspora of the Americas</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 6</td>
<td>African Cultures and Languages</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 8</td>
<td>African-American Creative Workshop</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 17</td>
<td>African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM/HIST 34</td>
<td>History of the American Civil Rights Movement</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM/WSTS 41</td>
<td>The African-American Women's Studies</td>
<td>3</td>
</tr>
<tr>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18

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.

ALLIED HEALTH

PRE-ALLIED HEALTH - FORMERLY PRE-ALLIED HEALTH

REGISTERED NURSING OPTION – MAJOR #4526

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 OF 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. Prepared to enter programs for careers in Dental Hygiene, Health Information Technology, Medical Assisting, Radiologic Technology, Registered Nursing or Respiratory Care.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHLTH 100</td>
<td>Introduction to Health Careers</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 20</td>
<td>Human Anatomy, and&lt;br&gt;BIOL 22</td>
<td>Human Physiology, or&lt;br&gt;BIOL 21A</td>
</tr>
<tr>
<td>CHEM 3A</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>HIT 10</td>
<td>Medical Terminology</td>
<td>3</td>
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</tbody>
</table>

Select two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2H</td>
<td>Cultural Anthropology, or&lt;br&gt;Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 31</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3B</td>
<td>Introductory Organic &amp; Biological&lt;br&gt;Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>FN 35</td>
<td>Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>FN 40</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2H</td>
<td>General Psychology, or&lt;br&gt;Honors General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1A/1AH</td>
<td>Introduction to Sociology, or&lt;br&gt;Honors Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 24-27
PUBLIC HEALTH SCIENCE FOR TRANSFER – MAJOR #8400

The Associate in Science in Public Health Science 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 Science 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 Science Associate in Science for Transfer provides preparedness in these job related career paths. To earn the Associate in Science in Public Health Science 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

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>3</td>
</tr>
<tr>
<td>BIOL 5</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 20</td>
<td></td>
</tr>
<tr>
<td>BIOL 22</td>
<td></td>
</tr>
<tr>
<td>BIOL 21A</td>
<td></td>
</tr>
<tr>
<td>BIOL 21B</td>
<td></td>
</tr>
<tr>
<td>CHEM 3A</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11</td>
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</tr>
<tr>
<td>PSY 2</td>
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</tbody>
</table>

Select a Minimum of 3 Units from the Following

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AHLTH 2</td>
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<tr>
<td>ECON 40</td>
<td>3</td>
</tr>
<tr>
<td>ECON 50</td>
<td>3</td>
</tr>
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<td>FN 40</td>
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</tr>
<tr>
<td>HLTH 2</td>
<td>3</td>
</tr>
<tr>
<td>PSY 25</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 33

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 OF 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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIND 31</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 32</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 35</td>
<td>3</td>
</tr>
</tbody>
</table>
COURSE OPTIONS: Select a minimum of 9 units

AFRAM 5 The African Diaspora of the Americas ................... 3
ANTHRO/CLS 28 Ancient Mexico .................................................... 3
CLS 11 Introduction to Chicano-Latino Studies ................ 3
ENGL 14 Folklore ................................................................ 3
ETHNST 10 Introduction to Ethnic Studies .............................. 3
GEOG 2 Cultural Geography .............................................. 3
SOC 2 American Minority Groups ..................................  3
Total  21

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 21 units in course work as listed above.
2. Associate degree requirements are listed on page 39 of this catalog. General Education requirements for transfer certification are on page 39.

AMERICAN INDIAN STUDIES – MAJOR #7681

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.

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

AMIND 31 American Indian Culture............................................. 3
AMIND 32 American Indian History............................................. 3
AMIND 34 American Indian Contemporary Society ............... 3
AMIND 35 American Indian Art.................................................... 3
Total  21

Note:
Two of the following courses may be challenged according to Foreign Language Department policy: ASL 1, 2.

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 OF 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, 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

ASL 1 Beginning American Sign Language ....................... 4
ASL 2 High-Beginning American Sign Language ............... 4
ASL 3 Intermediate American Sign Language ............... 4
ASL 4 High-Intermediate American Sign Language ......... 4
ASL 5 Deaf Culture .......................................................... 3
ASL 6 Structure of American Sign Language ............... 3
ASL 7 Deaf History ......................................................... 3
ASL 8 American Sign Language Literature/Folklore........... 3
ELECTIVE COURSE (3 Units)

ASL 20 Introduction to Interpreting................................. 3
CHDEV 30 Child, Family and Community ...................... 3
LING 10/10H Introduction to Language, or
Honors Introduction to Language ............................. 3
Total  31

Note:
Two of the following courses may be challenged according to Foreign Language Department policy: ASL 1, 2.
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)

Select 3-4 units from the following courses or any course not used in the section above:

<table>
<thead>
<tr>
<th>Units</th>
<th>ANTHRO 1</th>
<th>Biological Anthropology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or</td>
</tr>
<tr>
<td></td>
<td>ANTHRO 4</td>
<td>Introduction to Archaeology</td>
</tr>
</tbody>
</table>

Select 3-8 units from following courses or any courses not used in the section above:

<table>
<thead>
<tr>
<th>Units</th>
<th>BIOL 20</th>
<th>Human Anatomy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEO 1</td>
<td>Physical Geology</td>
</tr>
<tr>
<td></td>
<td>GEO 9</td>
<td>Introduction to Earth Science</td>
</tr>
<tr>
<td></td>
<td>PSY/MATH 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
</tr>
<tr>
<td></td>
<td>MATH 11</td>
<td>Elementary Statistics</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>Units</th>
<th>AFRAM 1</th>
<th>Introduction to African American Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AMIND 31</td>
<td>American Indian Culture</td>
</tr>
<tr>
<td></td>
<td>ANTHRO 12</td>
<td>Visual Anthropology: Introduction to</td>
</tr>
<tr>
<td></td>
<td>ANTHRO 15</td>
<td>Laboratory Methods in Archaeology</td>
</tr>
<tr>
<td></td>
<td>ANTHRO 16A</td>
<td>Field Archaeology I</td>
</tr>
<tr>
<td></td>
<td>ANTHRO 16B</td>
<td>Field Archaeology II</td>
</tr>
<tr>
<td></td>
<td>ANTHRO 24</td>
<td>Doing Archaeology: Hands-On!</td>
</tr>
<tr>
<td></td>
<td>ANTHRO/CLS 28</td>
<td>Ancient Mexico</td>
</tr>
<tr>
<td></td>
<td>ASAMER 15</td>
<td>Introduction to Asian-Americans</td>
</tr>
<tr>
<td></td>
<td>ASL 5</td>
<td>Deaf Culture</td>
</tr>
<tr>
<td></td>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
</tr>
<tr>
<td></td>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
</tr>
<tr>
<td></td>
<td>JOURN 16</td>
<td>Race, Gender and the Media</td>
</tr>
<tr>
<td></td>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
</tr>
</tbody>
</table>

Total 18-25

ANTHROPOLOGY – 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) 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

ELECTIVES (3 units minimum) Units
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.
ANTHRO 1L Biological Anthropology Laboratory .................... 1
ANTHRO 3 Archaeology and World Prehistory ...................... 3
ANTHRO 16B Field Archaeology II ......................................... 2
ANTHRO 24 Doing Archaeology: Hands-On! ......................... 1.5
ANTHRO/CLS 28 Ancient Mexico ........................................... 3
GEOG 10 Introduction to GIS ............................................. 3
*GEOL 1 Physical Geology ..................................................... 3
HIST 3 History of Ancient Rome .......................................... 4
HIST 18 History of Ancient Greece ...................................... 3
HIST 30 California History ................................................ 3
Total 18

*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.

APPLIED TECHNOLOGY

EMPLOYMENT ESSENTIALS – MAJOR #8101

A step incentive certificate signifying proficiency in basic employment skills (includes soft skills, written and oral communication, and problem solving skills). May be awarded after successful completion of 9 units chosen from the list.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate an understanding and application of professional workplace behaviors.
2. Assess problems and determine a well thought out solution.
3. Identify and construct appropriate workplace oral and written communication.

Choose a minimum of nine units from the following courses:

| Units |_intervals
|-------|-----|
| AT 10 | Technical Computer Applications .................. 3
| AT 19 | Work Experience (Cooperative), Occupational... 1-8
| AT 21 | Occupational Safety and Health .................. 2
| AT 40 | Preparing for Employment Opportunities .......... 3
| AT 130| Industrial Mathematics .................................. 3
| AT 131| Technical Report Writing .................................. 3

Total 9

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 OF 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 Units
ARCH 10 Architectural Design and Visualization I ............... 3
ARCH 11 Introduction to Architecture and Environmental Design ....... 2
ARCH 12 Architectural Practice I ......................................... 2
ARCH 14 Digital Tools for Architects .................................. 2
### 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. 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 transfer requirements listed above. In addition, those completing the associate degree requirements on page 39 of the catalog, upon application, will be awarded the associate in science degree.

#### 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.

<table>
<thead>
<tr>
<th>First Year - Fall Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 10 Architectural Design and Visualization I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 11 Introduction to Architecture and Environmental Design</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 12 Architectural Practice I</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 14 Digital Tools for Architects</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Year - Spring Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 20 Architectural Design and Visualization II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 21 Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 22 Architectural Practice II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 24 Building Information Modeling</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year - Fall Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 30 Architectural Design and Visualization III</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 31 Building Codes</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 32 Statics and Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 34 Digital Rendering</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year - Spring Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 40 Architectural Design and Visualization IV</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 41A Office Practices</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 42 Timber and Steel Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 42

**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.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 12 Architectural Practice I</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 22 Architectural Practice II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 32 Statics and Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 42 Timber and Steel Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 11

### 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.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 10 Architectural Design and Visualization I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 20 Architectural Design and Visualization II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 30 Architectural Design and Visualization III</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 40 Architectural Design and Visualization IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 12
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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 11</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 21</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 31</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 41A</td>
<td>3</td>
</tr>
<tr>
<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, wood frame 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>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>2</td>
</tr>
<tr>
<td>ARCH 14</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 20</td>
<td>3</td>
</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><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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 14</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 24</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 34</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
</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 OF 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) Units
*ART 3 Two-Dimensional Design .................. 3
*ART 4 Three-Dimensional Design .................... 3
ART 5/5H Art History Ancient to Medieval, or Honors Art History Ancient to Medieval ........ 3
ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern .... 3
*ART 7 Beginning Drawing, or ART 8 Beginning Figure Drawing and Anatomy ........ 3

Select a Minimum of 12 Units: (May take ART 7 or 8 if not taken in the core) Units
ART 7 Beginning Drawing............................... 3
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 19 Intermediate Painting: Oil/Acrylic ............... 3
ART 20 Intermediate Ceramics ........................... 3
ART 21 Intermediate Sculpture ............................ 3
ART 22A 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 25A Intermediate 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 52 Introduction to Digital Art/New Media ........ 3
ART 55 Introduction to Asian Art ........................ 3
ART 60 Art of the Ancient Americas ..................... 3

Total 27

*ART 3, ART 4, and ART 7 should be taken before other courses in the major.

ART HISTORY FOR TRANSFER – MAJOR #5206

The Associate in Arts in Art History for Transfer Degree offers a core foundation for the study of art history across cultures and eras. The program prepares students to continue their studies towards a degree in art history or studio arts at the California State University (CSU) and the University of California (UC) systems. Students will learn skills of analyzing art within its historical and cultural context using art-specific terminology and methodologies. To earn the Associate in Arts in Art History 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 18-20 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. For more information on university admission and transfer requirements, students should consult with a counselor.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:
1. Analyze a variety of techniques and formal visual elements of individual works of art in different media and diverse cultures.
2. Define and differentiate various styles of art throughout history.
3. Evaluate works of art in relation to context, historical background, and influence on subsequent artistic periods.
4. Compare stylistic elements that distinguish aesthetic and cultural trends.

REQUIRED CORE Units
ART 5/5H Art History Ancient to Medieval, or Honors Art History Ancient to Medieval ........ 3
ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern .... 3
ART 7 Beginning Drawing ................................. 3
### 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 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

**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>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
<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 8</td>
<td>Beginning Figure Drawing and Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>ART 9</td>
<td>Beginning Painting: Oil/Acrylic</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 14</td>
<td>Beginning Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 52</td>
<td>Introduction to Digital Art/New Media</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 18-20 units

#### List A: Select One (3 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
<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>
</tbody>
</table>

**List B: Select Three Courses (9 units)**

Select one course from three of the following areas (Drawing, Painting, Printmaking, Ceramics, Sculpture, or Applied Design)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 8</td>
<td>Beginning Figure Drawing and Anatomy, or</td>
<td></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></td>
</tr>
<tr>
<td>ART 9</td>
<td>Beginning Painting: Oil/Acrylic, or</td>
<td></td>
</tr>
<tr>
<td>ART 13</td>
<td>Beginning Watercolor Painting, or</td>
<td></td>
</tr>
<tr>
<td>ART 19</td>
<td>Intermediate Painting: Oil/Acrylic, or</td>
<td></td>
</tr>
<tr>
<td>ART 29</td>
<td>Advanced Painting: Oil/Acrylic</td>
<td></td>
</tr>
</tbody>
</table>

**Total:** 18-20 units
### Art

##### Major #5201

**STUDIO ART - FORMERLY THREE-DIMENSIONAL ART**

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 7</td>
<td>Beginning Drawing</td>
<td>3</td>
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</tbody>
</table>

**LIST A (9 units):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 8</td>
<td>Beginning Figure Drawing and Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>ART 9</td>
<td>Beginning Painting: Oil/Acrylic</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>Intermediate Drawing</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>
</tbody>
</table>

**Total** 24

*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 OF 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 identity dilemma for 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.
RECOMMENDED ELECTIVES 
ACRT 155 Spray Refinishing ........................................... 2
AT 19 Work Experience (Cooperative), Occupational ............. 1-8
AUTOT 54 Suspension, Steering, and Wheel Alignment .......... 4

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY - 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.

RECOMMENDED ELECTIVES Units
ACRT 153 Advanced ACR, or
ACRT 153A Advanced ACR, and
ACRT 153B Advanced ACR .................................................. 9
WELD 2A Introduction to Welding Technology ....................... 6
Total ....................................................... 15

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY - FORMERLY BODY AND FENDER MECHANIC - MAJOR #8071
Training in this field is designed to prepare the student for employment
in auto body repairing, reconstruction, and finishing.

CERTIFICATE OF ACHIEVEMENT
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.

RECOMMENDED ELECTIVES Units
ACRT 155 Spray Refinishing ................................................. 2
AT 19 Work Experience (Cooperative),
Occupational ......................................................... 1-8
AUTOT 54 Suspension, Steering, and Wheel
Alignment ................................................................ 4

RECOMMENDED ELECTIVES Units
ACRT 155 Spray Refinishing ................................................. 2
AT 19 Work Experience (Cooperative),
Occupational .................................................................. 1
AUTOT 54 Suspension, Steering, and Wheel
Alignment ................................................................ 4

RECOMMENDED ELECTIVES Units
ACRT 153 Advanced ACR, or
ACRT 153A Advanced ACR, and
ACRT 153B Advanced ACR .................................................. 9
WELD 2A Introduction to Welding Technology ....................... 6
Total ....................................................... 15
AUTOMOTIVE COLLISION REPAIR - MAJOR #807V

The Automotive Collision Repair program provides skills training in sheet metal repair, use of power tools, application of plastic body fillers and fiberglass, painting and refinishing in a 30 week program. This program prepares students for an entry level position in the Collision Repair industry.

CERTIFICATE OF COMPLETION

Student Learning Outcome:
1. After completing the Auto Collision Repair Program students will have the minimum basic skills necessary for an entry level position.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACRCTC 371</td>
<td>Fundamentals of Welding Technology and Working Sheet Metal</td>
<td>300</td>
</tr>
<tr>
<td>ACRCTC 372</td>
<td>Body Work Technology</td>
<td>300</td>
</tr>
<tr>
<td>ACRCTC 373</td>
<td>Automotive Refinishing Technology</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>900</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 Institute for Automotive Service Excellence (ASE) Education Foundation.

ASSOCIATE OF SCIENCE DEGREE AND CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Create a diagnostic path appropriate for a given system to industry standards.
2. Recommend an 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>
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<td>Total</td>
<td>57.5</td>
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</table>

ELECTIVES (4 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<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>Engine/Propulsion Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.5</td>
</tr>
</tbody>
</table>

RECOMMENDED SEQUENCE

First Year - First Semester

<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>WELD 1</td>
<td>Exploring Welding/Metals</td>
<td>3</td>
</tr>
</tbody>
</table>

2022-2023 Fresno City College Catalog
### Automotive Technology

**First Year - Second Semester**
- AUTOT 52 Automotive Electrical Systems ..................... 4
- AUTOT 53 Engine Performance ........................................ 4

**First Year - Third Semester**
- AUTOT 19 Work Experience (Cooperative), Occupational ...... 3
- AUTOT 51 Principles of Engine Theory and Service .......... 4

**Second Year - First Semester**
- AUTOT 19 Work Experience (Cooperative), Occupational ...... 3
- AUTOT 54 Suspension, Steering, and Wheel Alignment ...... 4
- AUTOT 56 Automotive Braking Systems ......................... 4
- AUTOT 58 Individualized Skills Training (IST) Chassis System I Laboratory .............................................. 1
- AUTOT 58A Individualized Skills Training (IST) Chassis System II Laboratory ........................................ 1

**Second Year - Second Semester**
- AUTOT 19 Work Experience (Cooperative), Occupational ...... 2
- AUTOT 282A Suspension and Wheel Alignment ................. 3
- AUTOT 282B Automotive Braking Systems ....................... 3
- AUTOT 283B Electrical Systems ........................................ 3
- AUTOT 284 Automotive Air Conditioning ......................... 3

**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>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2</td>
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<tr>
<td>AUTOT/ATGM 54</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT/ATGM 56</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total** 10

**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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
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<tr>
<td>AUTOT/ATGM 52</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT/ATGM 57</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total** 10

**DIESEL TECHNOLOGY – MAJOR #8059**
Satisfactory completion of this curriculum prepares the student for entry-level employment as a skilled technician in the diesel technology service and repair industry. Students will perform actual service and repair procedures in the diesel technology laboratory. This curriculum has been certified by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

**ASSOCIATE OF SCIENCE AND CERTIFICATE OF ACHIEVEMENT**

**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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
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</tr>
<tr>
<td>AUTOT 10</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>12</td>
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<tr>
<td>AUTOT 61</td>
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<td>AUTOT 65</td>
<td>6</td>
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<tr>
<td>AUTOT 66</td>
<td>1</td>
</tr>
<tr>
<td>WELD 1</td>
<td>3</td>
</tr>
</tbody>
</table>

AUTOT 68 Individualized Skills Training (IST) Truck & Bus Chassis System I Laboratory
AUTOT 68A Individualized Skills Training (IST) Truck & Bus Chassis System II Laboratory
AUTOT 68B Individualized Skills Training (IST) Truck & Bus Engine/Propulsion Systems
AUTOT 68C Individualized Skills Training (IST) Truck & Bus Power Train Systems Laboratory

Total 55

EMISSION TECHNICIAN – MAJOR #8054

Satisfactory completion of this curriculum prepares the student for employment as an emission service technician.

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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 161</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 161A</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 161B</td>
<td>1.5</td>
</tr>
<tr>
<td>AUTOT 283A</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 283B</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 13.5

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>Units</th>
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</thead>
<tbody>
<tr>
<td>AUTOT/ATGM 52</td>
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<tr>
<td>AUTOT/ATGM 53</td>
<td>4</td>
</tr>
<tr>
<td>AUTOT 161</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 11

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. 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 19</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT 161A</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 161B</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total 6.5

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. Create a diagnostic path for the hybrid electric vehicle (HEV) to industry standards.
2. Recommend an appropriate repair procedure for a given vehicle’s hybrid electric vehicle system to industry standards.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOT 9</td>
<td>3</td>
</tr>
<tr>
<td>AUTOT 19</td>
<td>2</td>
</tr>
<tr>
<td>AUTOT/ATGM 52</td>
<td>4</td>
</tr>
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</table>

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AUTOT/ATGM 57  Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics............ 4
AUTOT 170A  Introduction to Hybrid Electric Vehicles (HEVs) ... 2
AUTOT 170B  Service and Maintenance to Hybrid Electric Vehicles (HEVs) ........................................... 2
AUTOT 170C  Diagnosis and Repair to Hybrid Electric Vehicles (HEVs) .................................................. 2

Total  23

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. 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 Units
AUTOT 19  Work Experience (Cooperative), Occupational................................. 1
AUTOT 281A  Automotive Power Trains I ........................................................ 3
AUTOT 281B  Automotive Power Trains II .................................................... 3
AUTOT 283A  Engine Performance and Diagnosis ........................................... 3
AUTOT 283B  Electrical Systems ................................................................. 3
AUTOT 285  Automotive Engines ............................................................... 3

Total  16

POWERTRAIN TECHNICIAN I – MAJOR #8058A

Satisfactory completion of this curriculum prepares the student for employment as an automotive powertrain service technician level I.

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 Units
AUTOT 19  Work Experience (Cooperative), Occupational................................. 2
AUTOT/ATGM 52  Automotive Electrical Systems ............................................ 4
AUTOT/ATGM 55  Power Trains: Transmissions/Transaxles, Differentials, and Driveaxles .................. 6

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 Excellent (ASE) Education Foundation and General Motors Corporation certify this curriculum.

ASSOCIATE OF 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 Units
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............. 6
ATGM 56  Automotive Braking Systems ....................................................... 4
ATGM 57  Automotive Heating, Ventilation, Air Conditioning, and Advanced Electronics .... 4
AUTOT 9  Automotive Essentials ................................................................. 3
AUTOT 19  Work Experience (Cooperative), Occupational................................. 12
AUTOT 161A  Level 1 – Engine and Emission Control Fundamentals .................. 3
AUTOT 161B  Level 2 – Smog Check Procedures Training .................................. 1.5
ELECTIVES (4 units) Units
AUTOT 58 Individualized Skills Training (IST) .................1
AUTOT 58A Individualized Skills Training (IST) ...............1
AUTOT 58B Individualized Skills Training (IST) ..............1
AUTOT 58C Individualized Skills Training (IST) .............1

Total 56.5

RECOMMENDED SEQUENCE
First Year - Fall Semester Units
AT 10 Technical Computer Applications .......................3
ATGM 54 Suspension, Steering, and Wheel Alignment .......4
ATGM 56 Automotive Braking Systems .........................4
AUTOT 9 Automotive Essentials ..................................3

First Year - Spring Semester Units
ATGM 52 Automotive Electrical Systems ....................4
AUTOT 19 Work Experience (Cooperative), Occupational ..3

First Year - Summer Semester Units
ATGM 51 Principles of Engine Theory and Service ..........4
AUTOT 19 Work Experience (Cooperative), Occupational ..3

Second Year - Fall Semester Units
ATGM 53 Engine Performance ....................................4
AUTOT 19 Work Experience (Cooperative), Occupational ..3

Second Year - Spring Semester Units
ATGM 55 Power Trains: Transmissions/Transaxles, .......6
AUTOT 19 Work Experience (Cooperative), Occupational ..3
AUTOT 161A Level 1 – Engine and Emission Control ....3
AUTOT 161B Level 2 – Smog Check Procedures .............1.5

Second Year - Summer Semester Units
ATGM 57 Automotive Heating, Ventilation, Air ..........4

Associate Degree for Transfer. Please speak with a transfer counselor for more information about the benefits of the Associate Degree and the Associate Degree for Transfer.

ASSOCIATE OF 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.

Required Core – Select One Biology Sequence Units
BIOL 11A Biology for Science Majors I, and ..........BIOL 4 Principles of Zoology, or ...............BIOL 6 Principles of Botany, or ...............BIOL 11B Biology for Science Majors II ..........10

Required Core – Select One Chemistry Course Units
CHEM 1A General Chemistry ....................................5
CHEM 3A Introductory General Chemistry ..................4

Electives: Choose one to two courses from the following to make a minimum of 18 units total (Note: BIOL 4 or 6 can be used if they have not been used to complete the core requirement):

Units
BIOL 4 Principles of Zoology ....................................5
BIOL 5 Human Biology .............................................4
BIOL 6 Principles of Botany ......................................5
BIOL 7 Field Biology ................................................5
BIOL 14 Conservation Biology ....................................3
BIOL 31 Microbiology ..............................................5
BIOL 46 Elementary Horticulture ...............................3.5
CHEM 1B General Chemistry and Qualitative Analysis ....5
CHEM 3B Introductory Organic & Biological Chemistry ...4
GEOL 2 Historical Geology ........................................3
GEOL 5 Introduction to Oceanography .........................3
GEOL 12 Environmental Science ................................3

Total 18-20

BIOLOGY – FORMERLY LIFE SCIENCE DEGREE
– MAJOR #6082
The Associate Degree in Biology provides a foundation for students wishing to explore or pursue a wide range of fields in the Biological Sciences. The course pathway for this degree is more flexible than the Associate Degree in Biology, allowing students to match their non-biological courses to their intended academic or career goal. Students completing this degree will fulfill the core biology requirements for transfer to a CSU or UC, but without the guarantees offered by the...
BIOLOGY FOR TRANSFER – MAJOR #6082

The goal of the Associate in Science in Biology for Transfer program at Fresno City College is to award students with an associate degree, and provide them with special benefits/guarantees upon transfer to a CSU baccalaureate program in Biology. This degree may also prepare students to transfer into a UC baccalaureate program in Biology. 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. Please speak with a transfer counselor for more information about the benefits of the Associate of Science in Biology for Transfer and the Associate of Science degree.

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 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 PHYSICS 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
Total 33-38

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 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
BIOL 7 Field Biology ................................................................. 5
BIOL 11A Biology for Science Majors 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
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)

ANTHRO 16A Field Archaeology I ................................................ 2
BIOL 14 Conservation Biology .................................................. 3
GEOG 1 Physical Geography ....................................................... 4
GEOG 10 Introduction to GIS ......................................................... 3
GEOG 1 Physical Geology .............................................................. 4
GEOG 3 Geology Field Studies ........................................................ 1
GEOG 4 Geology of California .......................................................... 3
Total 22
HUMAN BIOLOGY – MAJOR #6084

The Associate Degree in Human Biology provides a foundation for students exploring or pursuing a range of opportunities in Human Biology or Allied Health fields. The course pathway for this degree includes the foundational courses typically required for entry into Allied Health programs. Please speak with a specialist counselor for more information specific to the individual Allied Health programs.

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:
1. Relate the structure to the function of the human body.
2. Analyze and interpret laboratory data.
3. Apply the principles of microbiology to the function of the human body in health and disease.
4. Critically evaluate different sources of scientific information.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 31</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3A</td>
<td>4</td>
</tr>
<tr>
<td>Select one A&amp;P sequence:</td>
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<tr>
<td>BIOL 20</td>
<td></td>
</tr>
<tr>
<td>BIOL 22</td>
<td></td>
</tr>
<tr>
<td>BIOL 21 A</td>
<td></td>
</tr>
<tr>
<td>BIOL 21 B</td>
<td></td>
</tr>
</tbody>
</table>

Total 18

BUSINESS ADMINISTRATION

BUSINESS ADMINISTRATION FOR TRANSFER 2.0 - MAJOR #2050

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 2.0 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 2.0 for Transfer 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 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>BA 10</td>
<td>3</td>
</tr>
<tr>
<td>BA 18</td>
<td>4</td>
</tr>
<tr>
<td>DS 21</td>
<td>3</td>
</tr>
<tr>
<td>DS 23</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40/40H</td>
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<tr>
<td>ECON 50/50H</td>
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</tbody>
</table>

Total 27

COMPETENCIES FOR TODAY’S EVOLVING WORKPLACE – FORMERLY 21ST CENTURY WORK COMPETENCIES - MAJOR #2037

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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 10</td>
<td>3</td>
</tr>
<tr>
<td>BA 33</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 6
COMPETENCIES FOR TODAY’S EVOLVING WORKPLACE – FORMERLY 21ST CENTURY WORK

COMPETENCIES - MAJOR #2037

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 OF COMPLETION

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</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 310</td>
<td>Introduction to Business</td>
<td>54</td>
</tr>
<tr>
<td>BA 333</td>
<td>Human Relations in the Workplace</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>108</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</th>
<th>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>
<td>1.5</td>
</tr>
<tr>
<td>BA 52</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7.5</td>
</tr>
</tbody>
</table>

ENTREPRENEURSHIP SKILLS – MAJOR #2042

Essential skills and effective strategies for launching, managing and/or working in an organization.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Launch a computer, navigate to productivity software, and begin working.
2. Complete a basic business plan.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 351</td>
<td>Business Planning and New Venture Launch</td>
<td>27</td>
</tr>
<tr>
<td>BT 379</td>
<td>Introduction to Microsoft Office Applications</td>
<td>27</td>
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<tr>
<td></td>
<td>Total</td>
<td>54</td>
</tr>
</tbody>
</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</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 31</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 33</td>
<td>Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>CIT 12</td>
<td>Computer Literacy, or CIT 15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>
BUSINESS ADMINISTRATION, MANAGEMENT

BUSINESS ADMINISTRATION, MANAGEMENT – MAJOR #2181

Business Administration degree designed to provide a basic understanding of and proficiency in the important functional areas related to business management.

ASSOCIATE OF 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>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACCTG 4A</strong> Financial Accounting, or BT 131 Applied Accounting</td>
<td>3.5-4</td>
</tr>
<tr>
<td>BA/BT 5 Workplace Communication</td>
<td>3</td>
</tr>
<tr>
<td>BA 10 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 18 Business and the Legal Environment</td>
<td>4</td>
</tr>
<tr>
<td>BA 31 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 33 Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>*BA 40 Supervision and Leadership, or BA 43 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10 Principles of Marketing</td>
<td>3</td>
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ELECTIVES: Select a Minimum of 6 Units

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td><strong>ACCTG 4A</strong> Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BA 28 E-Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BA 34 Fundamentals of Investing</td>
<td>3</td>
</tr>
<tr>
<td>BA 35 Financial Management for Business</td>
<td>3</td>
</tr>
<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 52 Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td><strong>BT 131</strong> Applied Accounting</td>
<td>3.5</td>
</tr>
</tbody>
</table>

*CIT 15 Computer Concepts.................................3
RE 40 Real Estate Principles............................3
RE 41 Real Estate Practice...............................3

Total 31.5-32

*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.

Note: Associate degree requirements are listed on page 39.

BUSINESS ADMINISTRATION, MANAGEMENT – MAJOR #2181

A certificate of achievement in Business Administration is designed to provide a basic understanding of and proficiency in the important functional areas related to business 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA/BT 5 Workplace Communication</td>
<td>3</td>
</tr>
<tr>
<td>BA 10 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 33 Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>*BA 40 Supervision and Leadership, or BA 43 Principles of Management</td>
<td>3</td>
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ELECTIVES: Select 8 Units

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
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<tbody>
<tr>
<td>ACCTG 4A Financial Accounting</td>
<td>4</td>
</tr>
<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>
</tr>
<tr>
<td>BA 28 E-Law &amp; Ethics</td>
<td>3</td>
</tr>
<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>
</tr>
<tr>
<td>BA 35 Financial Management for Business</td>
<td>3</td>
</tr>
<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>
</tbody>
</table>
Associate Degree and Certificate Programs

2022-2023 Fresno City College Catalog

Business Administration, Management

BA 51 Business Planning & New Venture Launch .......... 1.5
BT 131 Applied Accounting ....................................... 3.5
CIT 15 Computer Concepts ....................................... 3
MKTG 10 Principles of Marketing ............................. 3
RE 40 Real Estate Principles .................................... 3
RE 41 Real Estate Practice ....................................... 3

Total 20

* 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. Demonstration of appropriate skill sets with respect to 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 short-term and long-term accounting and finance objectives.

REQUIRED COURSES Units
ACCTG 4A Financial Accounting ............................ 4
ACCTG 4B Managerial Accounting .......................... 4
BA 35 Financial Management for Business ............... 3

Total 11

BUSINESS FINANCE AND INVESTMENTS
– MAJOR #2271

A step incentive, workforce preparation, and demonstrated qualification 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 Units
BA 34 Fundamentals of Investing ............................ 3
BA 35 Financial Management for Business ............... 3

Total 6

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 40</td>
<td>Supervision and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BA 43</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
</tbody>
</table>

PERSONAL FINANCE AND INVESTMENTS
– MAJOR #2032

Prepares students to enter the workforce and demonstrate acquired skills and qualifications to employers for those seeking an entry level position in banking, finance, or insurance. Also serves as a step incentive.

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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>BA 30</td>
<td>Personal Finance</td>
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<tr>
<td>BA 34</td>
<td>Fundamentals of Investing</td>
<td>3</td>
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</table>

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>Description</th>
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<tbody>
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<td>BA 102</td>
<td>Intermediate Professional and Civic Behaviors</td>
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<td>BA 103</td>
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</tr>
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<td>BA 104</td>
<td>Applied Professional and Civic Behaviors</td>
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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>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>RE 40</td>
<td>Real Estate Principles</td>
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<td>RE 41</td>
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<td>ACCTG 4A</td>
<td>Financial Accounting, or</td>
<td></td>
</tr>
<tr>
<td>BA 18</td>
<td>Business and the Legal Environment</td>
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</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, teamwork, 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>
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TOTAL 4.5

EMPHASIS AREA COURSES

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<td>BT 33</td>
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TOTAL 10.5

TOTAL 20

BUSINESS & TECHNOLOGY PROGRAM

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.

HOUSER OF 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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EMPHASIS AREA COURSES

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<tr>
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TOTAL 28.5

RECOMMENDED SEQUENCE

First Semester

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Second Semester

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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>
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<th>Title</th>
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<td>BT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>2</td>
</tr>
<tr>
<td>BT 23</td>
<td>Job Search and Workplace Skills</td>
<td>3</td>
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<tr>
<td>BT 112</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>BT 115</td>
<td>Refresher Math</td>
<td>3</td>
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EMPHASIS AREA COURSES

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<td>Records Management</td>
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<td>BT 10</td>
<td>Computer Applications II</td>
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<tr>
<td>BT 33</td>
<td>Social Media and Emerging Technologies in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BT 122</td>
<td>Typing Skillbuilding</td>
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Total: 31.5

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 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 OF 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Computer Document Processing I</td>
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<tr>
<td>BT 9</td>
<td>Computer Applications I</td>
<td>4</td>
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<tr>
<td>BT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
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</tr>
<tr>
<td>BT 23</td>
<td>Job Search and Workplace Skills</td>
<td>3</td>
</tr>
<tr>
<td>BT 112</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>BT 115</td>
<td>Refresher Math</td>
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REQUIRED EMPHASIS COURSES

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<th>Title</th>
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<td>PLEGAL 7</td>
<td>Law Office Administration and Ethics</td>
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<tr>
<td>PLEGAL 14</td>
<td>Law Office Computing</td>
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</table>

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 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 OF 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 1</td>
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</tr>
<tr>
<td>BT 9</td>
<td>Computer Applications I</td>
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<td>BT 19</td>
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<td>BT 23</td>
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REQUIRED EMPHASIS COURSES

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</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 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<td>BT 23</td>
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<tr>
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</table>

OFFICE PROFESSIONAL – ONE-PERSON OFFICE EMPHASIS - MAJOR #2064

Training is designed to provide advanced skills for entrepreneurs or individuals interested in running a one-person office. 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.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Use technology applications, office equipment, and software effectively in a professional setting.
2. Demonstrate key skills in order to effectively meet customer needs and provide outstanding customer service.
3. Apply emerging technologies to business and administrative processes to maximize efficiency and effectiveness.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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REQUIRED EMPHASIS COURSES

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REQUIRED EMPHASIS COURSES

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</table>
BOOKKEEPING FUNDAMENTALS - MAJOR #2015

Skills for spreadsheet management, bookkeeping, and accounting tasks, applicable to both the workplace and to more advanced courses in the subject matter.

CERTIFICATE

Student Learning Outcomes:
1. Create a worksheet in Excel using correct formatting, formulas, and functions, with the ability to create graphs.
2. Journalize and post a variety of typical business transactions, including payroll records and banking documents.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BT 24</td>
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</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 5</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
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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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
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MEDICAL OFFICE ASSISTANT – FORMERLY MEDICAL BILLING ASSISTANT - MAJOR #2243

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 procedures and insurance programs.
3. Communicate effectively and according to legal guidelines in a professional health care setting.

REQUIRED COURSES

<table>
<thead>
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<th>Units</th>
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<td>BT 143</td>
<td>1</td>
</tr>
<tr>
<td>BT 144</td>
<td>2.5</td>
</tr>
<tr>
<td>BT 147</td>
<td>2</td>
</tr>
<tr>
<td>BT 148</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</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 Units
BT 24 Beginning Excel, or 
BT 9 Computer Applications I ......................... 1-4
BT 28 Microsoft Word I .................................. 1.5
BT 126 Automated Business Records, or 
BT 9 Computer Applications I ......................... 1-4
BT 127 Microsoft Outlook and E-Mail ................. 1
BT 130 Beginning PowerPoint, or 
BT 9 Computer Applications I ......................... 1-4
Total 5.5-8.5

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 Units
BT 28 Microsoft Word I .................................. 1.5
BT 29 Microsoft Word II .................................. 1.5
Total 3

ONE-PERSON OFFICE – MAJOR #2063

The One-Person Office certificate allows students to gain fundamental skills needed for entrepreneurs or individuals interested in running a small business.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate key skills in order to effectively meet customer needs and provide outstanding customer service.
2. Journalize and post a variety of typical business transactions.
3. Apply emerging technologies to business and administrative processes to maximize efficiency and effectiveness.

COURSES Hours
BT 5 Workplace Communication ...................... 3
BT 31 21st Century Workforce Skills .................. 1.5
BT 33 Social Media and Emerging Technologies in the Workplace .................................... 3
BT 131 Applied Accounting ................................ 3.5
BT 132 Customer Service in the One-Person Office ................................................................. 3
Total 14

BASIC CLERICAL SKILLS – MAJOR #2471

Basic Clerical Skills is a non-credit program designed to develop and improve skills for those desiring office employment. Emphasis on keyboarding, filing, 10-key, spelling and vocabulary, telephone techniques and resume building. Students are required to perform at 70 percent or better for successful completion of the program. When all courses (A, B, C, D, and E) are completed successfully, a certificate is awarded.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Key straight copy of three minutes at a minimum of 20 gross words a minute with a minimum of 96% accuracy.
2. Demonstrate proper indexing of the names of individuals and business organizations to demonstrate skills of filing.
3. Analyze business-oriented material to identify spelling and word-choice errors.
4. Use a ten-key calculator accurately in a timely manner.
5. Produce an effective resume and cover letter.

COURSES Hours
BT 375A Introduction to Keyboarding .................. 72
BT 375B Introduction to Filing ............................ 28
BT 375C Basic Office Communications .................. 80
BT 375D Math Review and Ten-Key Calculator .......... 59
BT 375E Job Search Documents ........................... 59
Total 298

BASIC EMPLOYMENT SKILLS – MAJOR #8102

Practical, project-based program designed to prepare students for entry-level employment (includes training in customer service and introductory technology skills).

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Critically evaluate the “Top 10” 21st Century skills required to effectively participate in a global environment.
2. Launch a computer, navigate to productivity software, and begin working.

COURSES Hours
BT 331 21st Century Workforce Skills .................. 27
BT 377 Getting Started with Computers and Workplace Technology ......................................... 30
Total 57

2022-2023 Fresno City College Catalog
### 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>
</thead>
<tbody>
<tr>
<td>BT 370A</td>
<td>Office Assistant Applications .................. 300</td>
</tr>
<tr>
<td>BT 370B</td>
<td>Office Assistant Applications .................. 300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>600</td>
</tr>
</tbody>
</table>

### KEYBOARDING SKILLS - MAJOR #2472

Developing keyboarding speed and accuracy, and typing by touch to produce basic correspondence using word processing software.

**CERTIFICATE OF COMPLETION**

**Student Learning Outcome:**
1. Create, save, open and edit a word processed document.
2. Use the touch method to key letters, numbers, and figures on a computer keyboard.

**COURSES**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 306</td>
<td>Computer Keyboarding ............................ 27</td>
</tr>
<tr>
<td>BT 307</td>
<td>Introduction to Word Processing ................ 27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>54</td>
</tr>
</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 17 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.

### 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 OF ARTS DEGREE**

**Student Learning Outcomes:**
1. Demonstrate critical thinking and problem solving skills across disciplines as they relate to the Chicano-Latino community.
2. Demonstrate competency in oral, written, and research skills.
3. Demonstrate an understanding of, and an ability to critically analyze and interpret, cultural expressions of Chicanos and Latinos.
4. Acquire a comprehensive knowledge and understanding of Chicano-Latino history, culture, arts, and socio-political issues.
5. 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 COURSES**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies .......... 3</td>
</tr>
<tr>
<td>CLS 12A</td>
<td>Mexican American History: From Mesoamerica to the Mexican American War .......... 3</td>
</tr>
<tr>
<td>CLS 21</td>
<td>Chicano Literature .................................. 3</td>
</tr>
</tbody>
</table>
Social Justice Studies, Chicano Studies for Transfer — Major #7662

Social Justice Studies was created as an "Area of Emphasis" Associate Degree for Transfer (ADT). This ADT includes programs in Cultural or Ethnic Studies and Women's Studies, and is designed to give students a broad background in the histories of various racial and ethnic groups, and the contemporary challenges faced by these groups in our society.

Social Justice is the basic principle that all members of a society are entitled to equal rights and opportunities, and Social Justice Studies seeks to examine existing inequities, particularly as they relate to race, ethnicity, gender, and sexuality. The Social Justice Studies ADT in Chicano Studies is designed to transfer into the CSU system, and can be used as the foundation for a Bachelor's Degree in the following areas: American Studies, Chicana and Chicano or Mexican American Studies, and Comparative Ethnic Studies. To earn the Associate in Arts in Social Justice 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 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.

### COURSE OPTIONS: Select 11 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 13</td>
<td>Politics and the Chicano-Latino Community</td>
<td>3</td>
</tr>
<tr>
<td>CLS 14</td>
<td>Sociology of the Mexican American Community</td>
<td>3</td>
</tr>
<tr>
<td>CLS 17A</td>
<td>Beginning Mexican Folk Dance</td>
<td>3.5</td>
</tr>
<tr>
<td>CLS 20</td>
<td>Chicano Art</td>
<td>3</td>
</tr>
<tr>
<td>CLS 22</td>
<td>Art of the Ancient Americas</td>
<td>3</td>
</tr>
<tr>
<td>CLS 24</td>
<td>La Chicana and Latina</td>
<td>3</td>
</tr>
<tr>
<td>CLS 27B</td>
<td>Advanced Mexican Folk Dance</td>
<td>3.5</td>
</tr>
<tr>
<td>CLS 28</td>
<td>Ancient Mexico</td>
<td>3</td>
</tr>
<tr>
<td>CLS 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>CLS 32</td>
<td>Community Involvement: Service Learning</td>
<td>3</td>
</tr>
<tr>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
<tr>
<td>WSTS 14</td>
<td>Women's Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 20**

**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.

### ASSOCIATE IN ARTS DEGREE

#### Student Learning Outcomes:

1. Demonstrate academic preparedness for transfer to a four-year college.
2. Examine and appraise the intersections of race, class, gender, religion and other cultural indicators in issues of social justice in the United States.
3. Compare and contrast the primary goals of social justice movements of the 20th century and evaluate correlations to contemporary social justice movements.
4. Demonstrate critical thinking and problem solving skills across disciplines as they relate to the Chicano-Latino community.
5. Acquire a comprehensive knowledge and understanding of Chicano-Latino history, culture, arts, and socio-political issues.
6. 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 Code</th>
<th>Course 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>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three (3) courses from at least two of the following areas:

**Area 1: History or Government**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 29</td>
<td>History Of Mexico, Colonial to Contemporary Period</td>
<td>3</td>
</tr>
</tbody>
</table>

**Area 2: Arts and Humanities**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 20</td>
<td>Chicano Art</td>
<td>3</td>
</tr>
<tr>
<td>CLS 21</td>
<td>Chicano Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Area 3: Social Science**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 12A</td>
<td>Mexican American History: From Mesoamerica to the Mexican American War</td>
<td>3</td>
</tr>
<tr>
<td>CLS 12B</td>
<td>Mexican American History: From the Mexican-American War to the Present</td>
<td>3</td>
</tr>
<tr>
<td>CLS 30</td>
<td>Migration and the Family: Social and Psychological Perspectives</td>
<td>3</td>
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</tbody>
</table>

**Area 4: Major Preparation**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 13</td>
<td>Politics and the Chicano-Latino Community</td>
<td>3</td>
</tr>
<tr>
<td>CLS 14</td>
<td>Sociology of the Mexican American Community</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 18**
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 OF 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>
</tr>
</tbody>
</table>

Course Options - Group A: Select 3 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</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>
</tr>
</tbody>
</table>

Note: An associate in science degree will be awarded on the successful completion of 60 units, including General Education requirements.

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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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>
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</tbody>
</table>

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.
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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
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<td>15</td>
</tr>
</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 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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
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.

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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 12</td>
<td>Child Abuse</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>
<td>3</td>
</tr>
<tr>
<td>CHDEV/HS 60</td>
<td>Introduction to Child Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
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<tr>
<td></td>
<td>Total</td>
<td>15</td>
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</tbody>
</table>

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.

ASSOCIATE OF 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.
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 Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<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 11</td>
<td>The Young Child With Special Needs</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 16</td>
<td>Introduction to Early Intervention</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 17A</td>
<td>Infant and Toddler Practicum</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>
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<tr>
<td>CHDEV 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 48</td>
<td>Supporting Children with Challenging Behaviors</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
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</table>

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

CHDEV 3 Introduction to Curriculum ........................................ 3
CHDEV 6 Health, Safety and Nutrition in Early Childhood Education ........................................ 3
CHDEV 11 The Young Child With Special Needs .............................. 3
CHDEV 15 Diversity and Culture in Early Childhood Education Programs ........................................ 3
CHDEV 16 Introduction to Early Intervention .................................. 3
CHDEV 17A Infant and Toddler Practicum ...................................... 3
CHDEV 20 Observation and Assessment ......................................... 3
CHDEV 30 Child, Family and Community ...................................... 3
CHDEV 39 Child Growth and Development .................................... 3
CHDEV 48 Supporting Children with Challenging Behaviors ............... 3

Total 30

**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 work with children ages 0-3 in a variety of early care and education settings. Completion of the Certificate fulfills the coursework requirements 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.

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 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 support 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

Total 24

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

2022-2023 Fresno City College Catalog
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 course work. 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 course work in Child Development

(A list of Fresno City College specializations may be obtained from the Child Development Department)

*Site Supervisor level:

(Experience: 350 days of 3 + hours per day within 4 years, including at least 100 days supervising adults)

An AA or AS degree with 24 units in child development, including the core courses, plus:

Child Development 40A, Child Development 40B, and Child Development 45

* 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 STUDIES 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1</td>
<td>3</td>
</tr>
<tr>
<td>COMM 2</td>
<td>3</td>
</tr>
<tr>
<td>COMM 8/8H</td>
<td>3</td>
</tr>
<tr>
<td>COMM 10</td>
<td>3</td>
</tr>
<tr>
<td>COMM 25</td>
<td>3</td>
</tr>
<tr>
<td>Choose 3 units from the following:</td>
<td></td>
</tr>
<tr>
<td>COMM 4</td>
<td>3</td>
</tr>
<tr>
<td>COMM 26</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1</td>
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<tr>
<td>COMM 2</td>
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<tr>
<td>COMM 4</td>
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<td>COMM 8</td>
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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>Units</th>
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</thead>
<tbody>
<tr>
<td>AT 10</td>
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<tr>
<td>CADD 14</td>
<td>3</td>
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<tr>
<td>CADD 16</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>
### 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.

<table>
<thead>
<tr>
<th>First Year - First Semester</th>
<th>Units</th>
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<tbody>
<tr>
<td>AT 10 Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CADD 14 2D CAD I</td>
<td>3</td>
</tr>
<tr>
<td>CADD 16 3D Solid Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12 Drafting Practices</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>First Year - Second Semester</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CADD 22 Mechanical Drawing I</td>
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<tr>
<td>CADD 24 2D CAD II</td>
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<tr>
<td>CADD 26A 3D Solid Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>CADD 28 Product Development I</td>
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<td><strong>Total</strong></td>
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<thead>
<tr>
<th>Second Year - First Semester</th>
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<tbody>
<tr>
<td>CADD 32 Reverse Engineering I</td>
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<tr>
<td>CADD 36A 3D Solid Modeling III</td>
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<td><strong>Total</strong></td>
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<th>Second Year - Second Semester</th>
<th>Units</th>
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<tr>
<td>CADD 42 Mechanical Drawing III</td>
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<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

**Note:** Students planning to receive the AS degree must meet the associate in science degree requirements on page 39.

### Computer Aided Drafting and Design

**Entrepreneurship - Major #3056**

This program provides students interested in both CADD related occupations and entrepreneurship with skills they will need to successfully start and operate a business in this industry. This program directs its courses and training along practical lines as entrepreneurial ventures within the field of computer aided drafting and design.

**Certificate of Achievement**

**Student Learning Outcomes:**
1. Create a portfolio.
2. Create a presentation model from a solid model assembly.
3. Create, operate, manage and market a computer aided drafting and design startup.

**Required Courses**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10 Technical Computer Applications</td>
</tr>
<tr>
<td>BA 51 Business Planning and New Venture Launch</td>
</tr>
<tr>
<td>BA 52 Introduction to Entrepreneurship</td>
</tr>
<tr>
<td>CADD 16 3D Solid Modeling I</td>
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<td>CADD 26A 3D Solid Modeling II</td>
</tr>
<tr>
<td>CADD 28 Product Development I</td>
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<tr>
<td>CADD 36A 3D Solid Modeling III</td>
</tr>
<tr>
<td>DRAFT 12 Drafting Practices</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

### 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.
## 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>AT 10</td>
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### RECOMMENDED SEQUENCE

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<tr>
<td>CADD 26A 3D Solid Modeling II</td>
<td>3</td>
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<tr>
<td>DRAFT 12 Drafting Practices</td>
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<table>
<thead>
<tr>
<th>First Year – Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 24 2D CAD II</td>
<td>3</td>
</tr>
</tbody>
</table>

## 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 14 2D CAD I</td>
<td>3</td>
</tr>
<tr>
<td>CADD 16 3D Solid Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>CADD 26A 3D Solid Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>CAM 5 CNC Operation &amp; Maintenance for Machinist</td>
<td>2.5</td>
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<tr>
<td>DRAFT 12 Drafting Practices</td>
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### RECOMMENDED SEQUENCE

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<td>CADD 26A 3D Solid Modeling II</td>
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<td>DRAFT 12 Drafting Practices</td>
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</tr>
<tr>
<td>Total</td>
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</table>

## 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 intendant to start a career as a highly skilled CNC Setup person, a CNC Operator, and a CNC Programmer.

### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CADD 14 2D CAD I</td>
<td>3</td>
</tr>
<tr>
<td>CADD 16 3D Solid Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12 Drafting Practices</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>
ASSOCIATE OF 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

AT 10 Technical Computer Applications ......................... 3
AT 40 Preparing for Employment Opportunities ................ 3
AT 140 Introduction to Machine Shop ............................. 3
CAM 5 CNC Operation & Maintenance for Machinist .......... 2.5
CAM 10 CNC Mill Programming & Operation I ................. 4
CAM 15 CNC Programming for Machinist ....................... 2.5
CAM 20 CNC Mill/Programming & Operation II ............... 4
CAM 26 Lathe Programming and Operation II ................. 3
CAM 31 Multi-Axis Milling & Programming ..................... 3
Total  28

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 knowledgable foundation in 3D part designing with Mastercam and Fusion 360 CAD/CAM software for the purpose of Tool Programming. The Required Courses are intendent to start a career as a highly skilled CNC Setup person, a CNC Operator, and a CNC Programmer.

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.

REQUIRED COURSES

CAM 5 CNC Operation & Maintenance for Machinist .......... 2.5
CAM 10 CNC Mill Programming & Operation I ................. 4
CAM 15 CNC Programming for Machinist ....................... 2.5
CAM 20 CNC Mill/Programming & Operation II ............... 4
CAM 26 Lathe Programming and Operation II ................. 3
CAM 31 Multi-Axis Milling & Programming ..................... 3
Total  19

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 OF SCIENCE DEGREE

Student Learning Outcome:
1. Given a business related problem, design and develop a software solution using a programming language.

REQUIRED COURSES

CIT 15 Computer Concepts ............................................. 3
CIT 45 Data Communications ........................................ 3
CIT 48B A+ and Security Principles ................................. 4
DS 23 Business Statistics ............................................. 3
Select One of the Following:
CIT 60 Beginning Visual Basic ........................................ 4
CIT 63 Beginning Java Programming .............................. 4
CIT 66 Beginning C++ Programming ............................... 4
CIT 70 Beginning Swift Programming ............................. 4
CIT 93 JavaScript ......................................................... 4
Select Two of the Following:
BA 28 E-Law and Ethics ............................................... 3
CIT 28 Client/Server Databases ...................................... 3
CIT 40 Computer Operating Systems ............................ 4
CIT 50 Fundamentals of Networking .............................. 4
CIT 58C Security+ Fundamentals .................................... 3
CIT 58F Ethical Hacking ............................................... 3
CIT 65 Android Programming Applications .................... 4
CIT 69 iOS Programming Applications ........................... 4
Total 23-25

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 CORES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 63</td>
<td>Beginning Java Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIT 65</td>
<td>Android Programming Applications</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

## 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>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 69</td>
<td>iOS Programming Applications</td>
<td>4</td>
</tr>
<tr>
<td>CIT 70</td>
<td>Beginning Swift Programming</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

## 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>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 48A</td>
<td>IT+ Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIT 48B</td>
<td>A+ and Security Principles</td>
<td>4</td>
</tr>
<tr>
<td>CIT 48C</td>
<td>Security+ Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 62</td>
<td>Commercial &amp; Industrial Networking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

## 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 45</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIT 48A</td>
<td>IT+ Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIT 48B</td>
<td>A+ and Security Principles</td>
<td>4</td>
</tr>
<tr>
<td>CIT 54A</td>
<td>Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CIT 54B</td>
<td>Cybersecurity Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58C</td>
<td>Security+ Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIT 59</td>
<td>Linux System Administration</td>
<td>3</td>
</tr>
<tr>
<td>EST 62</td>
<td>Commercial &amp; Industrial Networking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

## 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>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 40</td>
<td>Computer Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIT 57</td>
<td>Wireless Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58B</td>
<td>Computer Forensics</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58C</td>
<td>Security+ Fundamentals</td>
<td>3</td>
</tr>
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</table>

**RECOMMENDED SEQUENCE**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Units</th>
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<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIT 40 Computer Operating Systems</td>
</tr>
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<td></td>
<td>CIT 58C Security+ Fundamentals</td>
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<tr>
<td>Semester</td>
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<tr>
<td>2</td>
<td>Units</td>
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<tr>
<td></td>
<td>CIT 57 Wireless Network Security</td>
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<tr>
<td></td>
<td>CIT 58B Computer Forensics</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</th>
<th>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>
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<td></td>
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</table>

RECOMMENDED SEQUENCE

Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIT 50</td>
<td>Fundamentals of Networking</td>
<td>4</td>
</tr>
<tr>
<td>CIT 58F</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
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</table>

Semester 2

<table>
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<tr>
<th>Course</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>

MICROSOFT CERTIFIED SPECIALIST – FORMERLY MCTC NETWORKING - MAJOR #2724

Designed to meet the training needs for qualified entry-level Microsoft Certified Technology Specialist network technicians. It is also designed to help prepare for the industry certification tests.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. 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 an administrative structure that meets the needs of an organization, design a Dynamic Host Configuration Protocol (DHCP) structure that supports Active Directory and meets the needs of the organization, and design a name resolution strategy that supports Active Directory and meets the needs of the organization.
2. 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>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 50</td>
<td>Fundamentals of Networking</td>
<td>4</td>
</tr>
<tr>
<td>CIT 55</td>
<td>Database Security</td>
<td>3</td>
</tr>
<tr>
<td>CIT 60</td>
<td>Beginning Visual Basic</td>
<td>4</td>
</tr>
<tr>
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RECOMMENDED SEQUENCE

Semester 1

<table>
<thead>
<tr>
<th>Course</th>
<th>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 60</td>
<td>Beginning Visual Basic</td>
<td>4</td>
</tr>
</tbody>
</table>

Semester 2

<table>
<thead>
<tr>
<th>Course</th>
<th>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 55</td>
<td>Database Security</td>
<td>3</td>
</tr>
</tbody>
</table>

NETWORK SECURITY/COMPUTER TECHNICIAN – FORMERLY NETWORKING/COMPUTER TECHNICIAN – MAJOR #2721

This option is designed to meet the training needs for qualified entry-level microcomputer and networking technicians.

ASSOCIATE OF 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.

2022-2023 Fresno City College Catalog
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>CIT 40</td>
<td>Computer Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIT 45</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIT 48B</td>
<td>A+ and Security Principles</td>
<td>4</td>
</tr>
<tr>
<td>CIT 49</td>
<td>Switching, Routing, and Wireless Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CIT 50</td>
<td>Fundamentals of Networking</td>
<td>4</td>
</tr>
<tr>
<td>CIT 58B</td>
<td>Computer Forensics</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58C</td>
<td>Security+ Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIT 58F</td>
<td>Ethical Hacking</td>
<td>3</td>
</tr>
<tr>
<td>EST 55A</td>
<td>Digital Concepts</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>33</td>
</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 Units
- BT 28 Microsoft Word I ............................................... 1.5
- BT 29 Microsoft Word II .............................................. 1.5
- BT 127 Microsoft Outlook and E-Mail .............................. 1

Second Semester Units
- CIT 23 Spreadsheet Fundamentals .................................... 2

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.

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 OF 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>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>
</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>
</tr>
<tr>
<td>Choose Two of the Following</td>
<td>Units</td>
<td></td>
</tr>
<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 94</td>
<td>Node.js</td>
<td>4</td>
</tr>
<tr>
<td>CIT 97</td>
<td>Web Development with the Go Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIT 99</td>
<td>Introduction to Machine Learning</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>21-22</td>
</tr>
</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.
Computer Information Technology

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>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>
</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>

Choose Two of the Following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</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 94</td>
<td>Node.js</td>
<td>4</td>
</tr>
<tr>
<td>CIT 97</td>
<td>Web Development with the Go Programming</td>
<td></td>
</tr>
<tr>
<td>CIT 99</td>
<td>Introduction to Machine Learning</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 21-22

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</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 82</td>
<td>Introduction to Web Development</td>
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<tr>
<td>CIT 85</td>
<td>HTML and CSS</td>
<td>3</td>
</tr>
<tr>
<td>CIT 93</td>
<td>JavaScript</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 10

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 OF 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</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH 12</td>
<td>Architectural Practice I</td>
<td>2</td>
</tr>
<tr>
<td>AT 21</td>
<td>Occupational Safety and Health</td>
<td>2</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 39 of the catalog, upon application, will be awarded the associate in science degree.

CONSTRUCTION TRADES II - FORMERLY CONSTRUCTION – MAJOR #8095

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

<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>2</td>
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<tr>
<td>AT 21</td>
<td>Occupational Safety and Health</td>
<td>2</td>
</tr>
<tr>
<td>CONS 50</td>
<td>Basic Residential Construction, or</td>
<td>4-6</td>
</tr>
<tr>
<td>CONS 50A</td>
<td>Basic Residential Construction, and</td>
<td></td>
</tr>
<tr>
<td>CONS 50B</td>
<td>Basic Residential Construction</td>
<td>4-6</td>
</tr>
<tr>
<td>CONS 51</td>
<td>Residential Construction: Foundations and Framing</td>
<td>9</td>
</tr>
<tr>
<td>CONS 56A</td>
<td>Residential Plumbing 1, or</td>
<td>3-4</td>
</tr>
<tr>
<td>CONS 175A</td>
<td>Residential Wiring 1</td>
<td>3-4</td>
</tr>
<tr>
<td>CONS 175B</td>
<td>Residential Wiring 2, or</td>
<td></td>
</tr>
</tbody>
</table>

Total 40.5-44.5
CONS 56A Residential Plumbing 1, or
CONS 175A Residential Wiring 1......................... 3-4

First Year - Second Semester
ARCH 21 Materials of Construction..................... 3
ARCH 22 Architectural Practice II ....................... 3
CONS 53 Residential Construction: Exterior and Interior Finish........................................ 9
CONS 55 Roof Framing Systems ......................... 2.5
CONS 56B Residential Plumbing 2, or
CONS 175B Residential Wiring 2......................... 3-4
Total 40.5-44.5

CONSTRUCTION TRADES I – FORMERLY RESIDENTIAL CONSTRUCTION – MAJOR #8094

The construction curriculum in this program is designed to provide students with hands-on training and technical information that will prepare them for entry into the construction industry or for personal construction projects.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Students will participate in the construction of a complete residential structure.
2. Students will participate in correct installation of roof trusses.
3. Students will construct wall framing according to trade practices and instructor's satisfaction.
4. Students will experience slab on grade installation according to trade practices and instructor's satisfaction.

First Year - First Semester
CONS 50 Basic Residential Construction, or
CONS 50A Basic Residential Construction, and
CONS 50B Basic Residential Construction .................... 4-6
CONS 51 Residential Construction: Foundations and Framing................................................. 9
Total 22-24

LIUNA LABORERS’ CONSTRUCTION – MAJOR #8093

LIUNA! Construction provides an opportunity for students to prepare for employment in the construction laborers industry. Specific preparation is provided in which allows apprentices to safely perform many of the types of construction performed by Laborers such as pouring concrete, laying asphalt, rigging and signaling, heavy equipment operation.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Demonstrate the ability to recognize safety hazards and determine the best actions to take to avoid/fix the issue.
2. Students will be able to demonstrate safe use and/or operation of tools and equipment common to the Laborers’ Construction industry.

Required Courses
APP 100 Forklift Orientation Initial.......................... 2
APP 101 Fundamentals of Construction .................. 3.5
APP 102 Hazardous Waste Removal Initial ............ 2
APP 103 Safety Certification .................................. 2
APP 104 Aerial Work Platform Initial ...................... 0.5
APP 105 Rigging and Signaling............................... 2
APP 106 Skid Steer Loader Orientation Initial .......... 2
APP 107 Concrete Techniques................................. 3.5
APP 108 Asphalt Paving Techniques....................... 3.5
Required Elective (16 units)
AT 19 Work Experience (Cooperative), Occupational.... 16
Total 37

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 1............................. 4
First Year - Second Semester............................ 4
Total 8
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

| CRIM 1 | Introduction to Criminology | 3 |
| CRIM 6 | Concepts of Criminal Law | 3 |
| CRIM 3 | Legal Aspects of Evidence | 3 |
| CRIM 4 | Principles & Procedures of the Justice System | 3 |
| CRIM 5 | Community Relations | 3 |
| CRIM 8 | Criminal Investigation | 4 |
| CRIM 9 | Crime Scene Forensic Evidence | 3 |
| CRIM 11 | Juvenile Delinquency | 3 |
| CRIM 20 | Introduction to Corrections | 3 |

Select two courses from the following:

| CRIM 13 | The Constitution and Your Individual Rights | 3 |
| MATH/PSY 42 | Statistics for the Behavioral Sciences, or | 4 |
| MATH 11 | Elementary Statistics | 4 |
| PSY 2/2H | General Psychology, or | 3 |
| Honors General Psychology | 3 |
| SOC 1A/1AH | Introduction to Sociology, or | 3 |
| Honors Introduction to Sociology | 3 |

Total 18-20

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 OF SCIENCE DEGREE

Student Learning Outcome:
1. The students will understand state and federal regulations and have knowledge of correctional systems.

REQUIRED CORE COURSES

| CRIM 4 | Principles & Procedures of the Justice System | 3 |
| CRIM 6 | Concepts of Criminal Law | 3 |
| CRIM 12 | Criminal Justice Communications | 3 |
| CRIM 13 | The Constitution and Your Individual Rights | 3 |
| CRIM 20 | Introduction to Corrections | 3 |
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>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 4</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 6</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 12</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 20</td>
<td>3</td>
</tr>
</tbody>
</table>

Course Options: Select Any 16 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 2</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 4</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 32</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 1</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 15</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11</td>
<td>3</td>
</tr>
<tr>
<td>CLS 13</td>
<td>3</td>
</tr>
<tr>
<td>CLS 14</td>
<td>3</td>
</tr>
<tr>
<td>CLS 24</td>
<td>3</td>
</tr>
<tr>
<td>CLS 28</td>
<td>3</td>
</tr>
<tr>
<td>CLS 29</td>
<td>3</td>
</tr>
<tr>
<td>CLS 30</td>
<td>3</td>
</tr>
</tbody>
</table>

Note:
1. An associate in science degree will be awarded to any candidate who successfully completes a minimum of 60 units.
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.
LAW ENFORCEMENT OPTION – MAJOR #8872

This certificate of achievement is designed for students considering careers as a police officer, deputy sheriff, 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>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 1</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 5</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 6</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 7</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 8</td>
<td>4</td>
</tr>
<tr>
<td>CRIM 12</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 15</td>
<td>3</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>
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</tr>
<tr>
<td>AFRAM 4</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11</td>
<td>3</td>
</tr>
<tr>
<td>SOC/CLS 14</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

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>
</tbody>
</table>

Total 8.5

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 healthcare facilities such as hospitals and long term health care.

CERTIFICATE

Student Learning Outcomes:
1. Demonstrate quantity 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>
</tbody>
</table>

Total 7.5
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>
</tbody>
</table>

Total 12

CULTURAL STUDIES

SOCIAL JUSTICE STUDIES, GENERAL FOR TRANSFER – MAJOR #7663

Social Justice Studies was created as an “Area of Emphasis” Associate Degree for Transfer (ADT). This ADT includes Programs in Cultural or Ethnic Studies and Women’s Studies, and is designed to give students a broad background in the histories of various racial and ethnic groups, and the contemporary challenges faced by these groups in our society. Social Justice is the basic principle that all members of a society are entitled to equal rights and opportunities, and Social Justice Studies seeks to examine existing inequities, particularly as they relate to race, ethnicity, gender, and sexuality. The Social Justice Studies ADT is designed to transfer into the CSU system, and can be used as the foundation for a Bachelor’s Degree in the following areas: African American Studies, Ethnic Studies, Women’s Studies, Labor Studies, and some Sociology Programs. To earn the Associate in Arts in Social Justice 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 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. Demonstrate academic preparedness for transfer to a four-year college.
2. Examine and appraise the intersections of race, class, gender, religion and other cultural indicators in issues of social justice in the United States.
3. Compare and contrast the primary goals of social justice movements of the 20th century and evaluate correlations to contemporary social justice movements.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1 Introduction to African American Studies, or AMIND 31 American Indian Culture, or ASAMER 15 Introduction to Asian-Americans, or CLS 11 Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>ETHNST 10 Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
<tr>
<td>WSTS 10 Changing Roles of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three (3) courses from at least two of the following areas:

Area 1: History or Government

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 4 Classical and Pre Colonial Africa</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 34 History of the American Civil Rights Movement</td>
<td>3</td>
</tr>
<tr>
<td>AMST 11 Law and Democracy</td>
<td>3</td>
</tr>
<tr>
<td>CLS 29 History Of Mexico, Colonial to Contemporary Period</td>
<td>3</td>
</tr>
</tbody>
</table>

Area 2: Arts and Humanities

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 3 African-American Art</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 8 African-American Creative Workshop</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 15 African American Music</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 35 American Indian Art</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 8 Chinese Culture</td>
<td>3</td>
</tr>
<tr>
<td>CLS 17A Beginning Mexican Folk Dance</td>
<td>3.5</td>
</tr>
<tr>
<td>CLS 20 Chicano Art</td>
<td>3</td>
</tr>
<tr>
<td>CLS 21 Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>CLS 22 Art of the Ancient Americas</td>
<td>3</td>
</tr>
<tr>
<td>CLS 27B Advanced Mexican Folk Dance</td>
<td>3.5</td>
</tr>
<tr>
<td>WSTS 36 Women’s Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Area 3: Social Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIND 31 American Indian Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34 The American Indian in Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 1 Indo-Chinese Americans</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 15 Introduction to Asian-Americans</td>
<td>3</td>
</tr>
<tr>
<td>CLS 12A Mexican American History: From Mesoamerica to the Mexican American War</td>
<td>3</td>
</tr>
<tr>
<td>CLS 12B Mexican American History: From the Mexican-American War to the Present</td>
<td>3</td>
</tr>
<tr>
<td>WSTS 47 Introduction to Lesbian and Gay Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

2022-2023 Fresno City College Catalog
Area 4: Major Preparation

AFRAM 2 African American Cultural Adaptation ................... 3
ASAMER 25 Asian American Social Issues .............................. 3
ASAMER 55 Introduction to Asian Art ...................................... 3
CLS 13 Politics and the Chicano-Latino Community ........ 3
CLS 14 Sociology of the Mexican American Community .... 3
CLS/WSTS 24 La Chicana and Latina .......................................... 3

Total 18-19

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, fitness/aerobic instructor, movement notator, performer, reconstructer, 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 OF 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

DANCE 10B Pre-Intermediate Modern Dance Technique, or
DANCE 28A Intermediate Modern Dance Technique ......1-1.5
DANCE 12B Beginning Ballet Part 2, or
DANCE 13A Intermediate Ballet Technique ....................1-1.5
DANCE 20A Beginning Modern Dance Composition ..........1-1.5
DANCE 30 Dance Appreciation .............................................. 3

Select two of the following courses:

DANCE 21 Fall Dance Concert 1 .........................................2-4
DANCE 22 Spring Dance Concert 1 ....................................2-4
DANCE 31 Fall Dance Concert 2 .........................................2-4
DANCE 32 Spring Dance Concert 2 ....................................2-4

Select at least six units from the following:

DANCE 9 Dance Conditioning ............................................. 1
DANCE 13A Intermediate Ballet Technique ....................... 1.5
DANCE 13B Pre-Advanced Ballet Technique ..................... 1.5
DANCE 14 Beginning Jazz Dance Technique ...................... 1
DANCE 15 Intermediate Jazz Dance Technique .................... 1
DANCE 16 Beginning Tap Dance ........................................ 0.5

Total 18-23

DECISION SCIENCE

DATA ANALYTICS AND PREDICTIVE MODELING

— MAJOR #2800

This certificate will provide students with experience in the field of data science including such areas as data management, data analysis, data collection, and data visualization. It is suitable for students who wish to begin work in the field, for those who wish to supplement their existing coursework with additional experiences in these data science areas, and for students who have obtained a bachelor's or other degrees in any number of analytical and scientific fields and wish to upgrade or update their skills and training.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Extract data from a database to solve data-related problems using programming languages used for data science and statistical software.
2. Produce, communicate, and interpret data analysis using data visualization, numerical summaries, modeling, and statistical inferences.
3. Recognize questions that can be investigated, the data source to select to make the investigation and understand the methods of randomly collecting data.
4. Fit, interpret and evaluate statistical models for prediction and inference.
5. Acquire data from various sources, maintain databases, and perform data exploration techniques to prepare data for analysis.
6. Provide students with mathematical tools to help them form a mathematical foundation for data science.

REQUIRED COURSES

CIT 19 Work Experience (Cooperative), Occupational ...... 1
CIT 28 Client/Server Databases ....................................... 3
DS 10 Introduction to Data Science ................................. 3
DS 21 Finite Mathematics, or
MATH 21 Finite Mathematics ............................................. 3

Total 3-3
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; Mathematics 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 35 or 40, Nutrition and Health or 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 licensure examinations, 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 in all dental hygiene courses. Less than a "C" 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 OF SCIENCE DEGREE

Student Learning Outcomes:

1. Graduate students with a high degree of competency and knowledge through a curriculum that integrates general education, biomedical sciences, dental sciences, and current dental hygiene theory, practice, and the provision of dental hygiene care for all populations.
2. Provide the highest quality of instruction and educational experience culminating in graduates prepared to take licensure examinations.
3. Provide employers with graduates who foster a commitment to scientific inquiry, community service, maintain standards of legal, ethical, and professional development.

FIRST YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 1A Oral Biology</td>
<td>2</td>
</tr>
<tr>
<td>DH 3A Preclinical Dental Hygiene Techniques</td>
<td>6</td>
</tr>
<tr>
<td>DH 4 Oral Radiography</td>
<td>4</td>
</tr>
<tr>
<td>DH 10 Head &amp; Neck Anatomy</td>
<td>2</td>
</tr>
</tbody>
</table>
### DEVELOPMENTAL SERVICES

#### CAREER READINESS – MAJOR #7010

The Career Readiness 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 prepare students to enter the workforce through career exploration and planning, interview preparation, and communication and workplace skills development. This certificate will enhance employment awareness of each student.

**CERTIFICATE**

**Student Learning Outcomes:**

1. Describe potential employment opportunities based on their educational and vocational experiences.
2. Demonstrate basic skills and strategies needed to plan for a potential career, develop job search skills.
3. Demonstrate time management and organizational skills.

### EFFECTIVE COMMUNICATIONS – MAJOR #6434

The Communication Skills Certificate Program offers an overview of the methods of communicating. It also trains students to use their communication skills effectively in various situations. This program is designed to enable students to achieve recognition of development in such areas as presentational speaking, problem solving and decision-making, and interpersonal communication. Students will have the knowledge and key skills to communicate effectively using simple, concise and direct language in order to achieve results in their communications with others. This certificate program allows individuals to develop the confidence and clarity in communication to support their career and educational growth.

**CERTIFICATE**

**Student Learning Outcomes:**

1. Demonstrate the ability to handle difficult situations with a flexible, genuine and self-confident approach.
2. Demonstrate key skills to communicate effectively using simple, concise, and direct language.
3. Demonstrate increased proficiency with the basics of appropriate communication skills.
4. Identify appropriate conflict-resolution skills.

#### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVSER 250</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 252B</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 260</td>
<td>3</td>
</tr>
</tbody>
</table>

#### ELECTIVES - Select 1 Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVSER 252A</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 262</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 278</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 279</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 285</td>
<td>2.5</td>
</tr>
<tr>
<td>DEVSER 286</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**Total** 13.5-15
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:
1. Describe potential employment opportunities based on their educational and vocational experience.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVSER 262</td>
<td>Group Interaction</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 277</td>
<td>Beginning Computer Literacy</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 278</td>
<td>Basic Word Processing for Work</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 279</td>
<td>Basic Modified Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

ORNAMENTAL HORTICULTURE SKILLS – FORMERLY ADAPTIVE ORNAMENTAL HORTICULTURE SKILLS – MAJOR #1061

The Ornamental Horticulture Skills Certificate Program is designed to provide students with disabilities 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

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>DEVSER 262</td>
<td>Group Interaction</td>
<td>3</td>
</tr>
<tr>
<td>First</td>
<td>DEVSER 275</td>
<td>Horticulture Skills I</td>
<td>2</td>
</tr>
<tr>
<td>Second</td>
<td>DEVSER 276</td>
<td>Horticulture Skills II</td>
<td>2</td>
</tr>
<tr>
<td>SECOND</td>
<td>VARIOUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>DEVSER 282</td>
<td>Greenhouse Workforce Prep</td>
<td>3</td>
</tr>
<tr>
<td>Second</td>
<td>DEVSER 282</td>
<td>Greenhouse Workforce Prep</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

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 4 Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVSER 262</td>
<td>Group Interaction</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 277</td>
<td>Beginning Computer Literacy</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 278</td>
<td>Basic Word Processing for Work</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 279</td>
<td>Basic Modified Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>DEVSER 283</td>
<td>Reading Comprehension 1</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 284</td>
<td>Reading Comprehension 2</td>
<td>4</td>
</tr>
<tr>
<td>DEVSER 285</td>
<td>Paragraphs to Essays</td>
<td>2.5</td>
</tr>
<tr>
<td>DEVSER 286</td>
<td>Essay Development and College Writing</td>
<td>2.5</td>
</tr>
<tr>
<td>DEVSER 291</td>
<td>Strategies for Academic Success</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10-15</td>
</tr>
</tbody>
</table>

DRAFTING – SEE COMPUTER AIDED DRAFTING AND DESIGN EDUCATION

ECONOMICS

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

<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 Honors Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>Introduction to Macroeconomics, or Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 5A</td>
<td>Mathematical Analysis I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 42</td>
<td>Statistics for the Behavioral Sciences, or Elementary Statistics, or</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td>3-4</td>
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</table>

Choose two of the following courses:

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<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>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>
</tbody>
</table>

Total 20-23

EDUCATION

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 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 Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 3</td>
<td>Introduction to Curriculum</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>
<td>3</td>
</tr>
<tr>
<td>EDUC 10</td>
<td>Introduction to Teaching With Classroom Fieldwork, or</td>
<td></td>
</tr>
<tr>
<td>CHDEV/EDUC 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>Reading and Comprehension, or Honors Reading and Comprehension</td>
<td>4</td>
</tr>
<tr>
<td>MATH 10A</td>
<td>Structure and Concepts in Mathematics I, or Foundations of Algebra</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Required additional 24-26 units of transfer level courses to total 48 units.

Total 48

No Child Left Behind legislation requires paraprofessionals to complete 48 units of college coursework or to pass an employer-administered exam.

ELEMENTARY 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. 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

<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 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>3</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 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 Honors Critical Reading &amp; Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2/2H</td>
<td>Critical Reasoning and Analytic Writing, or Honors 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 Honors Art History Ancient to Medieval</td>
<td>3</td>
</tr>
<tr>
<td>ART 6/6H</td>
<td>Art History Renaissance to Modern, or 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>

**LIST C:** Select 1 course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AFRAM/ENGL 17</td>
<td>African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ART 7</td>
<td>Beginning Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 9</td>
<td>Beginning Painting: Oil/Acrylic</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 15</td>
<td>Ceramic Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 17</td>
<td>Intermediate Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART/ASAMER 55</td>
<td>Introduction to Asian Art</td>
<td>3</td>
</tr>
<tr>
<td>CLS 21</td>
<td>Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>COMM/TA 12</td>
<td>Fundamentals of Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1</td>
<td>Western Civilization to 1648</td>
<td>3</td>
</tr>
<tr>
<td>MUS 3</td>
<td>Music Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MUS 13</td>
<td>History of Music</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 56 units

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 districts 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.

### REQUIRED 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, or</td>
<td></td>
</tr>
<tr>
<td>GEO 9</td>
<td>Introduction to Earth Science</td>
<td></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 10</td>
<td>Introduction to Teaching With Classroom Fieldwork, or</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 30</td>
<td>Introduction to Teaching, and Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>Reading and Comprehension, or</td>
<td></td>
</tr>
<tr>
<td>HIST 11</td>
<td>History of the United States to 1877</td>
<td>3</td>
</tr>
<tr>
<td>MATH 10A</td>
<td>Structure and Concepts in Mathematics I, or</td>
<td>3</td>
</tr>
<tr>
<td>MATH 103</td>
<td>Foundations of Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 48 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 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 10</td>
<td>Introduction to Teaching With Classroom</td>
<td></td>
</tr>
<tr>
<td>EDUC 30</td>
<td>Introduction to Teaching, and Fieldwork, or</td>
<td></td>
</tr>
<tr>
<td>EDUC 19/19X</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3-4</td>
</tr>
<tr>
<td>ENGL 1A/1AH</td>
<td>Reading and Comprehension, or Honors Reading and Comprehension</td>
<td>4</td>
</tr>
<tr>
<td>MATH 10A</td>
<td>Structure and Concepts in Mathematics I, or</td>
<td></td>
</tr>
<tr>
<td>MATH 103</td>
<td>Foundations of Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Required additional 24-26 units of transfer level courses to total 48 units.

Total 48

ASSOCIATE OF 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 CORE 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>EST 50</td>
<td>Introduction to Electrical Systems Technology</td>
<td>2</td>
</tr>
<tr>
<td>EST 51</td>
<td>Direct Current Fund of Electronics</td>
<td></td>
</tr>
<tr>
<td>EST 52</td>
<td>Alternating Current Fundamentals</td>
<td></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></td>
</tr>
<tr>
<td>EST 96D</td>
<td>National Electrical Code-Electrical Safety</td>
<td></td>
</tr>
</tbody>
</table>

Select a minimum of thirty-three (33) additional units from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>3</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>Variable Frequency Drives &amp; Motion Control</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 61</td>
<td>Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 62</td>
<td>Commercial &amp; Industrial Networking</td>
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</tr>
<tr>
<td>EST 80</td>
<td>Introduction to Photovoltaics</td>
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<td>EST 81</td>
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<td>EST 82A</td>
<td>Introduction to Robotics</td>
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<td>EST 82B</td>
<td>Robotic Applications</td>
<td>3.5</td>
</tr>
<tr>
<td>EST 83A</td>
<td>Robotics, Industrial – Introduction</td>
<td>3</td>
</tr>
<tr>
<td>EST 83B</td>
<td>Robotics, Industrial – Advanced Application</td>
<td>3</td>
</tr>
<tr>
<td>EST 84A</td>
<td>Introduction to Biomedical Electronics</td>
<td>3</td>
</tr>
<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>
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<tr>
<td>EST 96C</td>
<td>National Electrical Code Part 3</td>
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</tbody>
</table>

Total 52

ELECTRICAL SYSTEMS TECHNOLOGY
- FORMERLY ELECTRONIC TECHNOLOGY – MAJOR #B171

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. The student is advised to complete the Electricity Fundamentals 2 certificate prior.
PHOTOVOLTAICS- FORMERLY ADVANCED PHOTOVOLTAIC TECHNOLOGIST – MAJOR #8196

The courses in the photovoltaics certificate prepare the student for employment in the photovoltaic industry for auditors, site surveyors, designers, and other advanced positions. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

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>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 50</td>
<td>Introduction to Electrical Systems Technology</td>
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<tr>
<td>EST 55A</td>
<td>Digital Concepts</td>
<td>3</td>
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<tr>
<td>EST 56A</td>
<td>Wiring Methods</td>
<td>3</td>
</tr>
<tr>
<td>EST 57C</td>
<td>Voice and Data Cabling</td>
<td>3</td>
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<td>EST 61</td>
<td>Networking Fundamentals</td>
<td>3</td>
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<tr>
<td>EST 81</td>
<td>Photovoltaic Systems</td>
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</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</table>

BIOMEDICAL EQUIPMENT TECHNICIAN
- FORMERLY BIOMEDICAL TECH – MAJOR #6086

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. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 5</td>
<td>Human Biology</td>
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<td>Digital Concepts</td>
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<tr>
<td>EST 57A</td>
<td>Analog Communications</td>
<td>3</td>
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<tr>
<td>EST 57B</td>
<td>Digital Communications</td>
<td>3</td>
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<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>
</tr>
<tr>
<td>EST 83A</td>
<td>Industrial Robotics- Introduction</td>
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<td>EST 84A</td>
<td>Introduction to Biomedical Electronics</td>
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<td><strong>Total</strong></td>
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</tbody>
</table>

ELECTRICITY FUNDAMENTALS 1 – MAJOR #8191

This is an entry level certificate for students completing their first semester in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and begin looking for employment or internship opportunities.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Correctly compare Direct Current electrical values (i.e. Voltage, Current, Resistance, etc) as well as perform a hands-on ability to correctly connect components, and test instruments for a circuit defined by the instructor.
2. Correctly compare Alternating Current electrical values (i.e. Voltage, Current, Resistance, etc) as well as perform a hands-on ability to correctly connect components, and test instruments for a circuit defined by the instructor.
3. Identify and apply the device connections of a solid state device.
4. Safely and appropriately use basic electrical hand tools.
5. Create and modify files using Microsoft Office programs.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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>EST 50</td>
<td>Introduction to Electrical Systems Technology</td>
<td>2</td>
</tr>
<tr>
<td>EST 51</td>
<td>Direct Current Fundamentals 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>
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</tbody>
</table>
ELECTRICITY FUNDAMENTALS 2 – MAJOR #8192

This is a second level certificate for students completing their second semester in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and begin looking for employment or internship opportunities. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Safely apply correct wiring method techniques used in residential, commercial, and industrial applications to the National Electrical Code or authority having jurisdiction specifications.
2. Identify electrical safety hazards.
3. Apply engineering and national electrical code standards for electrical branch circuit systems, and for electrical over-current protection systems.

REQUIRED EMPHASIS COURSES Units
EST 56A Wiring Methods ......................................................... 3
EST 61 Networking Fundamentals ............................................. 3
EST 96D National Electrical Code-Electrical Safety .................. 3
Choose 2 National Electrical Code Courses (6 units) Units
EST 96A National Electrical Code Part 1 .................................... 3
EST 96B National Electrical Code Part 2 .................................... 3
EST 96C National Electrical Code Part 3 .................................... 3
Total 15

ELECTROMECHANICAL 1 – MAJOR #8193

This is an entry level certificate in Electromechanical in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and gain entry level employment or an internship in the Industrial Electromechanical field. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Correctly measure machine parts with precision and non-precision tools.
2. Perform basic setups on a drill press, milling machines, or engine lathes.
3. After completing a lab weld, students will be able to identify common defects or discontinuities in their flat or horizontal welds.
4. Correctly design wiring diagrams, and line diagrams needed to deploy various motor control situations.

REQUIRED CORE COURSES Units
AT 140 Introduction to Machine Shop ................................... 3
AT 150 Pneumatic & Hydraulic Systems ................................. 3
EST 56B Motor Controls ......................................................... 3
EST 61 Networking Fundamentals ............................................. 3
WELD 2A Introduction to Welding Technology ..................... 6
Total 18

ELECTROMECHANICAL 2 – MAJOR #8194

This is an advanced Electromechanical certificate in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and gain advanced employment or an internship in the Industrial Electromechanical field. The student is advised to complete the Electromechanical 1 certificate prior.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Write a program in ladder logic, transfer the program to a programmable logic controller, and operate the control system.
2. Read and interpret a Process & Instrumentation Diagram (P&ID).
3. Correctly operate a robot manually and automatically, from a given point A to point B.
4. Describe the different types of collaborative operations, and which types of robots can be used in each type of operation.
5. Distinguish between the variables used to measure linear speed and rotational speed and apply these variables in determining mechanical drive specifications.

REQUIRED CORE COURSES Units
AT 160 Mechanical Power Drive Systems ............................. 3
EST 56C Variable Frequency Drives & Motion Control .......... 3
EST 58 Programmable Logic Controllers ............................. 3
EST 59 Instrumentation Systems .......................................... 3
EST 83A Robotics, Industrial – Introduction ......................... 3
EST 83B Robotics, Industrial - Advanced Application .......... 3
Total 18

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. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

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.

FACILITY CONTROLS REQUIRED COURSES Units
EST 55A Digital Concepts ....................................................... 3
EST 55B Facility Automation ................................................... 3
EST 57C Voice and Data Cabling ............................................ 3
EST 59 Instrumentation Systems ............................................. 3
EST 61 Networking Fundamentals ........................................... 3
EST 62 Commercial & Industrial Networking ..................... 3
Total 18
LOW VOLTAGE - FORMERLY COMMUNICATION TECHNICIAN AND COMMUNICATIONS TECHNOLOGY – MAJOR #8187

Training is designed to prepare the student for employment as a communication technician. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

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.

LOW VOLTAGE REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 50</td>
<td>Introduction to Electrical Systems Technology</td>
<td>2</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 60</td>
<td>A+ PC Maintenance and Repair</td>
<td>3</td>
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<tr>
<td>EST 61</td>
<td>Networking Fundamentals</td>
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</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

INDUSTRIAL AUTOMATION 1 - FORMERLY INDUSTRIAL CONTROL TECHNICIAN AND CONTROL SYSTEMS – MAJOR #8188

Training in this specialized field is designed to prepare the student for employment as a control and instrument technician. The student is advised to complete the Electricity Fundamentals 2 certificate prior.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Create a digital logic circuit using appropriate logic gates.
2. Define and apply formulas (Ohm's and Kirchoff's Laws) for electrical circuit solutions.
3. Contrast the different parts of a Supervisory Control and Data Acquisition System (SCADA).
4. Understand the purpose, functions, and operations of a PLC.
5. Specify, install, and calibrate an instrumentation circuit for the solution of a problem.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EST 50</td>
<td>Introduction to Electrical Systems Technology</td>
<td>2</td>
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<td>EST 55C</td>
<td>SCADA Systems</td>
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<tr>
<td>EST 56B</td>
<td>Motor Controls</td>
<td>3</td>
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<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>
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<td>EST 59</td>
<td>Instrumentation Systems</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
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</table>

INDUSTRIAL AUTOMATION 2 – MAJOR #8195

This is an advanced Industrial Automation certificate in the Electrical Systems Technology program. This certificate allows the student to show perspective employers their progress and gain advanced employment or an internship in the Industrial Automation field. The student is advised to complete the Industrial Automation 1 certificate prior.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Program an electronic motor controller (VFD) for motor speed control.
2. Demonstrate the correct procedure for connecting computers and network devices.
3. Correctly operate a robot manually and automatically, from a given point A to point B.
4. Describe the different types of collaborative operations, and which types of robots can be used in each type of operation.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 56C</td>
<td>Variable Frequency Drives &amp; Motion Control</td>
<td>3</td>
</tr>
<tr>
<td>EST 61</td>
<td>Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EST 83A</td>
<td>Robotics, Industrial - Introduction</td>
<td>3</td>
</tr>
<tr>
<td>EST 83B</td>
<td>Robotics, Industrial - Advanced</td>
<td>3</td>
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</tbody>
</table>

INDUSTRIAL MAINTENANCE TECHNICIAN – MAJOR #8190

An industrial maintenance technician performs installation, repair and maintenance of commercial or industrial machinery in buildings, plants or factory setting, to ensure the machines' proper functionality.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Perform basic setups on the drill press, milling machines or engine lathes in a safe manner and to industry practices.
2. Demonstrate the ability to inspect fluid and pneumatic system components for proper operation and identify problems and the means to correct.
3. Given a SMAW and GMAW power source, students will be able to properly set up and adjust the machine to make a successful weld.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
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<tr>
<td>AT 140</td>
<td>Introduction to Machine Shop</td>
<td>3</td>
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<tr>
<td>AT 150</td>
<td>Pneumatic &amp; Hydraulic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AT 160</td>
<td>Mechanical Power Drive Systems</td>
<td>3</td>
</tr>
<tr>
<td>EST 51</td>
<td>Direct Current Fund of Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EST 53</td>
<td>Lab Safety Practices</td>
<td>2</td>
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<td>EST 56B</td>
<td>Motor Controls</td>
<td>3</td>
</tr>
<tr>
<td>EST 58</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
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<tr>
<td>WELD 2A</td>
<td>Introduction to Welding Technology</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</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>MMCTC 372</td>
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<td>EST 55A</td>
<td>Digital Concepts</td>
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<td>EST 56B</td>
<td>Motor Controls</td>
<td>3</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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<td><strong>Total</strong></td>
<td></td>
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</tbody>
</table>

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 OF 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>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>
<td>Mathematical Analysis I</td>
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<td>Mathematical Analysis II</td>
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<td>MATH 6</td>
<td>Mathematical Analysis III</td>
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<td>PHYS 4A</td>
<td>Physics for Scientists and Engineers</td>
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<td>Physics for Scientists and Engineers</td>
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<td><strong>Civil Track: Select a minimum of 4 courses</strong></td>
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<td><strong>Units</strong></td>
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<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
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<tr>
<td>ENGR 1A</td>
<td>Elementary Plane Surveying I</td>
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<tr>
<td>ENGR 2</td>
<td>Graphics</td>
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<td>Engineering Materials</td>
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<td>ENGR 8</td>
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<td>GEOL 1</td>
<td>Physical Geology</td>
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<td>MATH 17</td>
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Civil Track: Select a minimum of 4 courses

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<td>MATH 7</td>
<td>4-5</td>
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<tr>
<td>PHYS 4C</td>
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</tbody>
</table>

**Total 40-44**

**ENGINEERING: COMPUTER – FORMERLY ENGINEERING: COMPUTER, SOFTWARE - MAJOR #3015**

This degree program is designed as basic coursework necessary for pursuing a career in the field of computer engineering. Students will be prepared for engineering internship opportunities and transferring to four-year engineering programs.

**ASSOCIATE OF 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 5 Programming and Problem Solving in MATLAB</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 10 Introduction to Engineering</td>
<td>2</td>
</tr>
<tr>
<td>MATH 5A Mathematical Analysis I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 5B Mathematical Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 6 Mathematical Analysis III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4A Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4B Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
</tbody>
</table>

**Computer Track:**

Select a minimum of 4 courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 40 Programming Concepts &amp; Methodology I</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 41 Programming Concepts &amp; Methodology II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 6 Circuits with Lab</td>
<td>4</td>
</tr>
</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 OF 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.
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REQUIRED CORE COURSES

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
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<td>ENGR 5</td>
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<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>
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</tr>
<tr>
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</tr>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CSCI 40</td>
<td>Programming Concepts &amp; Methodology I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 6</td>
<td>Circuits with Lab</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 12</td>
<td>Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>MATH 7</td>
<td>Introduction to Differential Equations, or</td>
<td></td>
</tr>
<tr>
<td>MATH 17</td>
<td>Differential Equations and Linear Algebra</td>
<td>4-5</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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</tr>
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</table>

Electrical Track: Select a minimum of 4 courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
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<tr>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>42-44</td>
</tr>
</tbody>
</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.
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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</tbody>
</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 OF 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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</thead>
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Mechanical, Aerospace, and Manufacturing Track:

Select a minimum of 4 courses

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<tbody>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 2</td>
<td>Graphics</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 4</td>
<td>Engineering Materials</td>
<td>3</td>
</tr>
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<td>ENGR 6</td>
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<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>
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Total 39-44

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:
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Mechanical, Aerospace, and Manufacturing Track:

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</tr>
</tbody>
</table>

Total 39-44
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.

Major Course Options - Section A

Select one of the course sequences (6 units total) from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 46A</td>
<td>English Literature to 1800, and ENGL 46B</td>
</tr>
</tbody>
</table>

Total 6 units

ENGLISH FOR MULTI-LINGUAL STUDENTS

HIGH-INTERMEDIATE ACADEMIC AND VOCATIONAL EMLS – MAJOR #5300

The Certificate of Competency in Intermediate Academic and Vocational English for Multilingual Students prepares high-intermediate EMLS students with the reading, writing and oral skills in English needed to succeed in a variety of intermediate social, vocational and academic situations. Students attaining this certificate will be ready to begin study at the Advanced Academic level and will have demonstrated their level of proficiency at the Intermediate level.
CERTIFICATE OF COMPETENCY

Student Learning Outcomes:
1. Write multi-draft paragraphs at the high-intermediate level.
2. Write an in-class, timed essay at the high intermediate level; write multiple-draft academic essays at the high-intermediate level.
3. Identify and self-correct common ESL grammatical errors at the high-intermediate level.
4. Apply appropriate reading strategies to high-intermediate level academic texts and articles.
5. Demonstrate level appropriate critical thinking skills.
6. Develop vocabulary skills and demonstrate an understanding of vocabulary at the high-intermediate level.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMLS 367G High-Intermediate Academic Grammar</td>
<td>18</td>
</tr>
<tr>
<td>EMLS 367LS High-Intermediate Listening and Speaking</td>
<td>18</td>
</tr>
<tr>
<td>EMLS 367P High-Intermediate Pronunciation Improvement and Accent Reduction</td>
<td>18</td>
</tr>
<tr>
<td>EMLS 367RW High Intermediate Academic Reading and Writing</td>
<td>108</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>162</strong></td>
</tr>
</tbody>
</table>

LOW-INTERMEDIATE ACADEMIC AND VOCATIONAL EMLS – MAJOR #5301

The Certificate of Competency in Low-Intermediate Academic and Vocational English for Multilingual Students prepares EMLS students with the reading, writing and oral skills in English needed to succeed in a variety of low-intermediate social, vocational and academic situations. Students attaining this certificate will be ready to begin study at the High-Intermediate Academic level and have demonstrated their level of proficiency at the Low-Intermediate level.

CERTIFICATE OF COMPETENCY

Student Learning Outcomes:
1. Apply level appropriate reading skills and strategies to low-intermediate academic texts.
2. Write sentences and paragraphs at the low-intermediate level.
3. Write an in-class timed paragraph at the low-intermediate level.
4. Understand and apply low-intermediate grammar rules and structures.
5. Demonstrate level appropriate critical thinking skills.
6. Develop vocabulary skills and use level appropriate vocabulary.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMLS 365G Low-Intermediate Academic Grammar</td>
<td>18</td>
</tr>
<tr>
<td>EMLS 365LS Low-Intermediate Listening and Speaking</td>
<td>18</td>
</tr>
<tr>
<td>EMLS 365P Low-Intermediate Pronunciation Improvement and Accent Reduction</td>
<td>18</td>
</tr>
<tr>
<td>EMLS 366RW Intermediate Academic Reading and Writing ...</td>
<td>108</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>162</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRET 22A Firefighter II Part A</td>
<td>2</td>
</tr>
<tr>
<td>FIRET 22B Firefighter II Part B</td>
<td>3</td>
</tr>
<tr>
<td>FIRET 130A Basic Fire Academy – Part 1</td>
<td>14.5</td>
</tr>
<tr>
<td>FIRET 130B Basic Fire Academy – Part 2</td>
<td>14.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>
COMPANY OFFICER – MAJOR #8836

This program will allow for the student to obtain a AS degree in their chosen field and have transfer credits to the CSU system to pursue a higher education. This will position them for future success.

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:
1. Integrate health and safety plans into daily activities and implement department policies and procedures.
2. Inspect, identify and address hazards and violations during fire inspections. Investigate and determine cause and origin at fire scenes.
3. Conduct an incident size up and implement the Incident Command System (ICS) to various types of emergency incidents. Prepare an Incident Action Plan (IAP) for a wildland incident.

REQUIRED COURSES Units
FIRET 9 Fire Fighting Practices ......................... 3
FIRET 23 Company Officer 2A: Human Resource Management for Company Officers ............ 2
FIRET 24 Company Officer 2B: General Administrative Functions for Company Officers ............. 1
FIRET 25 Company Officer 2C: Fire Inspections and Investigations for Company Officers .......... 2
FIRET 26 Company Officer 2D: All-Risk Command Operations for Company Officers ............... 2
FIRET 27 Company Officer 2E: Wildland Incident Operations for Company Officers ................. 2
FIRET 29 Intermediate Wildland Fire Behavior ........... 2
FIRET 30E Incident Commander HAZMAT ............... 0.4
FIRET 50L Instructor I Instructional Methodology ........ 2
FIRET 150N Instructor II Instructional Development .... 2
Total 18.4

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 OF 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 Units
FIRET 1 Fire Protection Organization ...................... 3
FIRET 2 Fire Prevention Technology ..................... 3
FIRET 3 Fire Protection Equipment and Systems ......... 3
FIRET 4 Building Construction for Fire Protection .......... 3
FIRET 5 Fire Behavior and Combustion .................... 3
FIRET 14 Principles of Fire & Emergency Services Safety & Survival .................. 3

COURSE OPTIONS: Select Two Courses Units
FIRE 8 Fire Hydraulics ........................................ 3
FIRE 9 Fire Fighting Practices ............................... 3
FIRE 22A Firefighter II Part A ................................. 2
FIRE 22B Firefighter II Part B ................................. 3
*FIRET 130A Basic Fire Academy – Part 1 ...................... 6
*FIRET 130B Basic Fire Academy – Part 2 ...................... 6
FIRET 131 Emergency Medical Technician 1 ............... 9.5
Total 23-33.5

* FIRET 130A and 130B each carries a value of up to 14.5 units; however, only 6 units can be applied to the associate in science degree and certificate of achievement.

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 Units
FIRET 1 Fire Protection Organization ...................... 3
FIRET 2 Fire Prevention Technology ..................... 3
FIRET 3 Fire Protection Equipment and Systems ......... 3
FIRET 4 Building Construction for Fire Protection .......... 3
FIRET 5 Fire Behavior and Combustion .................... 3
FIRET 14 Principles of Fire & Emergency Services Safety & Survival .................. 3

COURSE OPTIONS: Select Two Courses Units
FIRE 8 Fire Hydraulics ........................................ 3
FIRE 9 Fire Fighting Practices ............................... 3
FIRE 22A Firefighter II Part A ................................. 2
FIRE 22B Firefighter II Part B ................................. 3
*FIRET 130A Basic Fire Academy – Part 1 ...................... 6
*FIRET 130B Basic Fire Academy – Part 2 ...................... 6
FIRET 131 Emergency Medical Technician 1 ............... 9.5
Total 23-33.5

* FIRET 130A and 130B each carries a value of up to 14.5 units; however, only 6 units can be applied to the certificate of achievement.
**FIREFIGHTER 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>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRET 22A</td>
<td>2</td>
</tr>
<tr>
<td>FIRET 22B</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
</tbody>
</table>

**EMERGENCY MEDICAL TECHNICIAN I – MAJOR #8842**

Designed to prepare personnel in the fire, life safety and related fields to render care to the ill and injured in the prehospital environment, in accordance with all federal, state and local Emergency Medical Services authorities.

**CERTIFICATE**

**Student Learning Outcome:**
1. Be eligible to take the National Registered Emergency Medical Technician (NREMT)/California State certification examination.

**REQUIRED COURSE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRET 131</td>
<td>9.5</td>
</tr>
</tbody>
</table>

**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 Medical Technician-B recertification.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 15</td>
<td>3</td>
</tr>
<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>
</tr>
<tr>
<td>FSM 11</td>
<td>2</td>
</tr>
<tr>
<td>FSM 15</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19</td>
<td>1-4</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
</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>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRET 131</td>
<td>9.5</td>
</tr>
<tr>
<td>FIRET 133</td>
<td>21.5</td>
</tr>
<tr>
<td>FIRET 136</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
</tr>
</tbody>
</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 OF 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>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 15</td>
<td>3</td>
</tr>
<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>
</tr>
<tr>
<td>FSM 11</td>
<td>2</td>
</tr>
<tr>
<td>FSM 15</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19</td>
<td>1-4</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
</tbody>
</table>
### 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>1</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
</tbody>
</table>

### 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>
</tr>
<tr>
<td>FSM 11</td>
<td>2</td>
</tr>
<tr>
<td>FSM 19</td>
<td>3</td>
</tr>
<tr>
<td>FSM 35</td>
<td>2</td>
</tr>
<tr>
<td>FSM 38</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
</tbody>
</table>

* 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>
<td>4</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 31</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3A</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 8A</td>
<td>3</td>
</tr>
<tr>
<td>FN 40</td>
<td>3</td>
</tr>
<tr>
<td>FN 1</td>
<td>3</td>
</tr>
<tr>
<td>FSM 35</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11</td>
<td>2</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>4, 3</td>
</tr>
</tbody>
</table>

* Prerequisite to required course(s).

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 Associate 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 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 Associate 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 31</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1B</td>
<td>10</td>
</tr>
<tr>
<td>FN 40</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2</td>
<td>3</td>
</tr>
<tr>
<td>List A: Select at least one course from the list below:</td>
<td></td>
</tr>
<tr>
<td>BIOL 20</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 21A</td>
<td>9</td>
</tr>
<tr>
<td>BIOL 21B</td>
<td>9</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 28A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 29A</td>
<td>5</td>
</tr>
<tr>
<td>MATH 11</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH/PSY 42</td>
<td>3-4</td>
</tr>
<tr>
<td>DS 23</td>
<td>3-4</td>
</tr>
</tbody>
</table>

List B: Select one course:
FN 1 Principles of Food Preparation 3

Total 27-33

FOOD SERVICE MANAGEMENT

FOOD SERVICE MANAGEMENT – MAJOR #5691

This degree is designed to prepare students for employment in Food Service Management.

ASSOCIATE OF 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>3.5-4</td>
</tr>
<tr>
<td>BT 131</td>
<td>3.5-4</td>
</tr>
<tr>
<td>BA 18</td>
<td>4</td>
</tr>
<tr>
<td>CIT 15</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40/40H</td>
<td>3</td>
</tr>
<tr>
<td>FN 1</td>
<td>3</td>
</tr>
<tr>
<td>FN 35</td>
<td>3</td>
</tr>
<tr>
<td>FN 40</td>
<td>3</td>
</tr>
</tbody>
</table>
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>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>
</tbody>
</table>

Total | 34.5-38 |

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 39. General Education requirements for transfer certification are on page 39.

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>
</tr>
</tbody>
</table>

Total | 14 |

ELECTIVES: Select 10 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT 6</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>FN 42</td>
<td>Child 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 38</td>
<td>Quantity Food Preparation</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.

GENERAL EDUCATION

CSU-GE BREADTH – MAJOR #5010

The certificate of achievement in CSU GE provides students with an introduction to the breadth and depth of liberal arts and science with an emphasis in global perspectives. It provides students with a foundation in the liberal arts and sciences and prepares them for specialized study in a particular discipline or program. CSU Certification is not automatic, please request certification through Admission and Records. This Certificate of Achievement will allow the student to complete the lower division general education required courses but does not meet all the requirements for transfer (see Note). A course or sequence of courses used to satisfy a requirement in one area may not be used to satisfy a requirement in another area. Students should check with a counselor and review the FCC college catalog for further clarification. Note: The CSU Certificate of Achievement only confirms completing CSU general education requirements and does not meet Associate Degree or transfer admission requirements.
CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Evaluate and apply a global understanding of the liberal arts and sciences.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1 Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 2 Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 4 Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 8/8H Group Communication, or Honors Group Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Area A2 – Written Communication

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A/1AH Reading and Composition, or Honors Reading and Composition</td>
<td>4</td>
</tr>
</tbody>
</table>

Area A3 – Critical Thinking

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 25 Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 13 The Constitution and Your Individual Rights</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>PHIL 2/2H Critical Reasoning and Analytic Writing, or Honors Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 13 Legal and Judicial Reasoning</td>
<td>3</td>
</tr>
</tbody>
</table>

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 or be accompanied by a course in B3.

Area B1 – Physical Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTRO 10 Basic Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1A General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 1B General Chemistry and Qualitative Analysis</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 3A Introductory General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3B Introductory Organic &amp; Biological Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 8A Elementary Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 28A Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 28B Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 1 Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 7 Physical Geography: Earth's Surface</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 8 Physical Geography: Weather and Climate</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 1 Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2 Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 4 Geology of California</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 5 Introduction to Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 12 Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>NATSCI 1A Integrated Science: Physics and Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2A General Physics 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2B General Physics 2</td>
<td>4</td>
</tr>
</tbody>
</table>

Area B2 – Life Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1L Biological Anthropology</td>
<td>3</td>
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<tr>
<td>BIOL 3 Introduction to Life Science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 4 Principles of Zoology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 5 Human Biology</td>
<td>4</td>
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<tr>
<td>BIOL 6 Principles of Botany</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 7 Field Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 11A Biology for Science Majors I</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 11B Biology for Science Majors II</td>
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<td>BIOL 31 Microbiology</td>
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<td>BIOL 55 Introduction to the Biology of Humans</td>
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Area B3 – Laboratory Activity

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Area B4 – Mathematics/Quantitative Reasoning

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### Area C - Arts and Humanities – Nine semester units minimum with at least one course each from C1 and C2.

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JAPAN 2  High-Beginning Japanese .......................... 5
LING 10/10H Introduction to Language, or
  Honors Introduction to Language .......................... 3
PHIL 1A/1AH Theories of Knowledge and Reality, or
  Honors Theories of Knowledge and Reality ............. 3
PHIL 1B Social and Political Philosophy .......................... 3
PHIL 1C/1CH Ethics, or
  Honors Ethics .............................................. 3
PHIL 3A Ancient Philosophy ...................................... 3
PHIL 3B Modern Philosophy .............................. 3
POLS 13 Introduction to Political Theory and Thought.... 3
PORT 1 Beginning Portuguese ................................. 5
PORT 2 High-Beginning Portuguese ........................... 5
SPAN 1 Beginning Spanish ...................................... 5
SPAN 2 High-Beginning Spanish ................................. 5
SPAN 2NS Preparatory Spanish for Native Speakers ...... 5
SPAN 3 Intermediate Spanish .................................. 5
SPAN 3NS Intermediate Spanish for Spanish Speakers ..... 5
SPAN 4 High-Intermediate Spanish ............................. 5
SPAN 4NS High-Intermediate Spanish for Spanish
  Speakers .......................................................... 5
SPAN 5 The Short Story: Mexico, Spain, and the U.S. ... 4
SPAN 6 The Short Story: Latin America ........................ 4
SPAN 7 Advanced Spanish: Composition and
  Grammar .............................................................. 4
SPAN 9 Spanish Business and Culture.......................... 4
SPAN 41 Introduction to Poetry in Spanish ................. 4
SPAN 42 Hispanic American Culture ............................ 4
TA 32 Theatre History and Dramatic Literature II ....... 3

AREA D: Social Sciences — Six semester units minimum. Units
AFRAM 1 Introduction to African American Studies ....... 3
AFRAM 4 Classical and Pre Colonial Africa ................. 3
AMIND 31 American Indian Culture ............................ 3
AMIND 34 The American Indian in Contemporary Society 3
AMST 11 Law and Democracy ................................. 3
ANTHRO 2/2H Cultural Anthropology, or
  Honors Cultural Anthropology ............................ 3
ANTHRO 3 Archaeology and World Prehistory .......... 3
ANTHRO 4 Introduction to Archaeology ........................ 3
ANTHRO 8 Language and Culture ............................. 3
ANTHRO 12 Visual Anthropology: Introduction to
  Ethnographic Film ............................................. 3
ASAMER 1 Indo-Chinese Americans .............................. 3
ASAMER 10 Hmong Culture ...................................... 3
ASAMER 15 Introduction to Asian–Americans ............... 3
ASAMER 25 Asian American Social Issues .................. 3
BA 20 Law and the Legal System .............................. 3
CDEV 30 Child, Family and Community ........................ 3
CHDEV/PSY 38 Lifespan Development .......................... 3
CHDEV/PSY 39 Child Growth and Development .............. 3
CLS 11 Introduction to Chicano-Latino Studies ............... 3

CLS 12A Mexican American History: From
  Mesoamerica to the Mexican American War ........... 3
CLS 12B Mexican American History: From the
  Mexican-American War to the Present ................. 3
HIST 25 History Of Mexico, Colonial to
  Contemporary Period ...................................... 3
HIST 29 Migration and the Family: Social and
  Psychological Perspectives .................................. 3
ECON 25 Introduction to Economics .......................... 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
ETHINST 10 Introduction to Ethnic Studies .................. 3
GEOG 2 Cultural Geography .................................. 3
GEOG 4A World Geography .................................... 3
GEOG 4B World Geography .................................... 3
GEOG 20 Geography of California ............................ 3
GLST 1 Introduction to Global Studies .......................... 3
GLST 2 Global Issues ............................................. 3
HIST 1 Western Civilization to 1648 .......................... 3
HIST 2 Western Civilization Since 1648 ................. 3
HIST 3 History of Ancient Rome .............................. 3
HIST 11 History of the United States to 1877 ......... 3
HIST 12/12H History of the United States since 1877, or
  Honors History of the United States
  since 1877 ................................................. 3
HIST 15 History of the British Isles .......................... 3
HIST 17 History of the Muslim World to 1405 ........ 3
HIST 18 History of Ancient Greece ............................ 3
HIST 20 World History I, to 1600 ............................ 3
HIST 21 United States Civil War .............................. 3
HIST/WSTS 22 History of American Women ................. 3
HIST 23 World History II, since 1500 .......................... 3
HIST 25 History of Religion in the United States ....... 3
HIST 30 California History ..................................... 3
HIST/AFRAM 34 History of the American Civil Rights
  Movement ......................................................... 3
HS/SOC 10 Introduction to Aging Studies .................. 3
JOURN 1 Introduction to Mass Communication .......... 3
JOURN 16 Race, Gender and the Media ..................... 3
POLSCI 1 Modern Politics ...................................... 3
POLSCI 2/2H American Government, or
  Honors American Government ............................ 3
POLSCI 3 Introduction to Political Theory and Thought .............................................. 3
POLSCI 5 Comparative Government ......................... 3
POLSCI 24 International Relations ............................ 3
PSY 2/2H General Psychology, or
  Honors General Psychology ............................. 3
SOC 1A/1AH Introduction to Sociology, or
  Honors Introduction to Sociology .......................... 3
SOC 1B Critical Thinking about Social Problems .......... 3
SOC 2 American Minority Groups ............................ 3
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<td>PE 8C</td>
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<td>PE 6C</td>
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<td>PE 5C</td>
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<td>PE 4C</td>
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**AREA E: Lifelong Learning and Self-Development – Three semester units minimum.** *Three units of physical education alone is insufficient to fulfill AREA E. Units*

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<td>Lifespan Development</td>
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<td>CHDEV/PSY 39</td>
<td>Child Growth and Development</td>
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<td>COUN 53</td>
<td>College and Life Management</td>
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<td>FA 35</td>
<td>Nutrition and Health</td>
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<td>Nutrition</td>
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<td>HLTH 1</td>
<td>Contemporary Health Issues</td>
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<td>PE 4</td>
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<td>PE 13B</td>
<td>Intermediate Tennis</td>
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<td>PE 14</td>
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<td>PE 15A</td>
<td>Weight Training (Women)</td>
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<td>PE 15B</td>
<td>Weight Training (Men)</td>
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<td>PE 17</td>
<td>Hatha Yoga</td>
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<td>PE 27</td>
<td>High-Intensity Cardio Interval Training</td>
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<td>PE 29B</td>
<td>Competitive Badminton</td>
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<td>PE 29C</td>
<td>Off-Season Conditioning for Badminton</td>
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<td>PE 30B</td>
<td>Competitive Baseball</td>
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<td>PE 30C</td>
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<td>PE 31B</td>
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<td>PE 32B</td>
<td>Competitive Cross Country</td>
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<td>PE 34B</td>
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<td>PE 35B</td>
<td>Cheer and Stunt</td>
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<td>PE 36B</td>
<td>Competitive Soccer</td>
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<td>Off-Season Conditioning for Soccer</td>
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<td>PE 37B</td>
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<td>PE 38B</td>
<td>Competitive Tennis</td>
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<td>PE 38C</td>
<td>Off-Season Conditioning for Tennis</td>
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<td>Competitive Track and Field</td>
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<td>PE 39C</td>
<td>Off-Season Conditioning for Track and Field</td>
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<td>PE 40B</td>
<td>Competitive Volleyball</td>
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<td>PE 40C</td>
<td>Off-Season Conditioning for Volleyball</td>
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<td>PE 41B</td>
<td>Competitive Men's Wrestling</td>
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<td>PE 41C</td>
<td>Off-Season Conditioning for Men's Wrestling</td>
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<td>PE 42B</td>
<td>Competitive Water Polo</td>
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<td>PE 42C</td>
<td>Off-Season Conditioning for Water Polo</td>
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<td>PE 43B</td>
<td>Competitive Swimming &amp; Diving</td>
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<tr>
<td>PE 43C</td>
<td>Off-Season Conditioning for Swimming &amp; Diving</td>
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<td>PE 44B</td>
<td>Competitive Sand Volleyball</td>
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<td>PE 44C</td>
<td>Off-Season Conditioning for Sand Volleyball</td>
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<td>PE 45</td>
<td>Performance Training and Conditioning</td>
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<td>PE 46B</td>
<td>Competitive Women's Wrestling</td>
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<td>PE 46C</td>
<td>Off-Season Conditioning for Women's Wrestling</td>
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<tr>
<td>PE 71</td>
<td>Soccer</td>
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<td>PE 72</td>
<td>Spinning for Fitness</td>
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<tr>
<td>PSY 2/2H</td>
<td>General Psychology, or Honors General Psychology</td>
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<td>PSY 25</td>
<td>Human Sexuality</td>
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<tr>
<td>PSY 33</td>
<td>Personal and Social Adjustment</td>
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**AREA F – Ethnic Studies – Three semester units minimum.**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CLS/WSTS 24</td>
<td>La Chicana and Latina</td>
<td>3</td>
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<td>CLS 33</td>
<td>Community Involvement: Service Learning</td>
<td>3</td>
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<tr>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
<td>3</td>
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</table>

**Total** 39

**NOTES: 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 2/2H or 6. These courses may also be used simultaneously to satisfy course requirements on the CSU GE-Breadth pattern.**

**IGETC BREADTH – MAJOR #5020/5030**

The general education or breadth requirements are designed to give CSU/UC undergraduates a broad background in all major academic disciplines—natural sciences, physical sciences, social sciences, mathematics, humanities and visual and performing arts. This certificate allows the student to complete Certification of the Intersegmental General Education Transfer Curriculum (IGETC) for the California State University (CSU) or University of California (UC). IGETC Certification is not automatic, please request certification through Admission and Records. This Certificate of Achievement will allow the student to complete the lower division general education required courses but does not meet all the requirements for transfer (see Note). A course or sequence of courses used to satisfy a requirement in one area may not be used to satisfy a requirement in another area. Students should check with a counselor and review the FCC college catalog for further clarification. NOTE: The IGETC Certificate of Achievement only confirms completing CSU and/or UC general education requirements and does not meet Associate Degree of transfer admission requirements. Completion of IGETC is NOT an admission requirement to CSU or UC. It is not advisable for students who are pursuing majors that require extensive lower division preparation, such as Engineering.

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or Liberal Studies, to follow IGETC. All courses must be completed with a "C" or better. Courses must be on the college's approved IGETC list at the time the course was completed. Students should check with a counselor and review the FCC college catalog for further clarification. NOTE: The IGETC Certificate of Achievement only confirms completing CSU and/or UC general education requirements and does not meet Associate Degree of transfer admission requirements. Completion of IGETC is NOT an admission requirement to CSU or UC. It is not advisable for students who are pursuing majors that require extensive lower division preparation, such as Engineering or Liberal Studies, to follow IGETC. All courses must be completed with a "C" or better. Courses must be on the college's approved IGETC list at the time the course was completed. Students should check with a counselor and review the FCC college catalog for further clarification.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Evaluate and apply a global understanding of the liberal arts and sciences.

AREA 1: English Composition - CSU: 3 courses required, one each from Group 1A, 1B, and 1C listed below (9 semester units minimum)

UC: 2 courses required, one each from Group 1A and 1B listed below (6 semester units minimum)

<table>
<thead>
<tr>
<th>Group 1A – English Composition:</th>
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<tbody>
<tr>
<td>ENGL 1A/1AH Reading and Composition, or Honors Reading and Composition</td>
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<tr>
<td>ENGL 3/3H Critical Reading &amp; Writing, or Honors Critical Reading &amp; Writing</td>
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<tr>
<td>PHIL 2H Critical Reasoning and Analytic Writing, or Honors Critical Reasoning and Analytic Writing</td>
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<table>
<thead>
<tr>
<th>Group 1B – Critical Thinking-English Composition:</th>
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<tbody>
<tr>
<td>COMM 1 Introduction to Public Speaking</td>
<td>3</td>
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<tr>
<td>COMM 4 Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>COMM 8/8H Group Communication, or Honors Group Communication</td>
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<tr>
<td>COMM 25 Argumentation</td>
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<tr>
<th>Group 1C – Oral Communication:</th>
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<tr>
<td>CSCI 26 Discrete Mathematics for Computer Science</td>
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<tr>
<td>DS 21 Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>DS 23 Business Statistics</td>
<td>3</td>
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<tr>
<td>MATH 3A College Algebra</td>
<td>4</td>
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<tr>
<td>MATH 4B Pre-Calculus</td>
<td>4</td>
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<tr>
<td>MATH 5A Mathematical Analysis I</td>
<td>5</td>
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<tr>
<td>MATH 5B Mathematical Analysis II</td>
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<td>MATH 6 Mathematical Analysis III</td>
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<tr>
<th>Group 2A - Mathematics</th>
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<tbody>
<tr>
<td>MATH 10A Structure and Concepts in Mathematics I</td>
<td>3</td>
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<tr>
<td>MATH 10B Structure and Concepts in Mathematics II</td>
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<tr>
<td>MATH 11/11H Elementary Statistics, or Honors Elementary Statistics</td>
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<tr>
<td>MATH 17 Differential Equations and Linear Algebra</td>
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<tr>
<td>MATH 21 Finite Mathematics</td>
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<tr>
<td>MATH 26 Elementary Linear Algebra</td>
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<tr>
<td>MATH/PSY 42 Statistics for the Behavioral Sciences</td>
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<tr>
<td>AFRAM 3 African-American Art</td>
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<tr>
<td>AFRAM 15 African American Music</td>
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<tr>
<td>AMIND 35 American Indian Art</td>
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<tr>
<td>ARCH 15A History of Architecture I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 15B History of Architecture II</td>
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<tr>
<td>ART 2 Art Appreciation</td>
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<tr>
<td>ART 5/5H Art History Ancient to Medieval, or Honors Art History Ancient to Medieval</td>
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<tr>
<td>ART 6/6H Art History Renaissance to Modern, or Honors Art History Renaissance to Modern</td>
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<tr>
<td>ART/ASAMER 55 Introduction to Asian Art</td>
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<tr>
<td>ART 60/CIS 22 Art of the Ancient Americas</td>
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<td>ART 70 Modern and Contemporary Art</td>
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<td>CLS 20 Chicano Art</td>
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<td>DANCE 30 Dance Appreciation</td>
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<td>FILM 7 Film Genres</td>
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<td>MUS 3 Music Fundamentals</td>
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<td>MUS 12 Music Appreciation</td>
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<td>MUS 13 History of Music</td>
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<td>MUS 15 World Music Survey</td>
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<td>MUS 16 Jazz History and Appreciation</td>
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<td>MUS 17 History of Rock</td>
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<td>TA 30 Theatre Appreciation</td>
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<tr>
<td>TA 31 Theatre History and Dramatic Literature I</td>
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<th>Group 3B - Humanities</th>
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<td>ARMEN 2 High-Beginning Armenian</td>
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<td>ASAMER 8 Chinese Culture</td>
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<tr>
<td>ASL 2 High-Beginning American Sign Language</td>
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<tr>
<td>ASL 3 Intermediate American Sign Language</td>
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<tr>
<td>ASL 4 High-Intermediate American Sign Language</td>
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<tr>
<td>ASL 7 Deaf History</td>
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<tr>
<td>ASL 8 American Sign Language Literature/Folklore</td>
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<tr>
<td>CHIN 2 High-Beginning Chinese</td>
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<tr>
<td>CLS 21 Chicano Literature</td>
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<tr>
<td>ENGL 1B Introduction to the Study of Literature</td>
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<td>ENGL 12 The Bible as Literature</td>
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<td>ENGL 14 Folklore</td>
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<tr>
<td>ENGL/AFRAM 17 African-American Literature</td>
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<td>ENGL/WSTS 36 Women's Literature</td>
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ENGL/HUMAN 42 Classic Myths ........................................... 3
ENGL 44A Survey of World Literature to the Mid-Seventeenth Century ........................................... 3
ENGL 44B Survey of World Literature from Mid-Seventeenth Century to 1950 ........................................... 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 47 Introduction to Shakespeare ........................................... 3
ENGL 48A Introduction to American Literature to 1865 ........................................... 3
ENGL 48B Introduction to American Literature 1865 to the Present ........................................... 3
FILM 1 Introduction to Film Studies ........................................... 3
FILM 2A History of Cinema 1895-1960 ........................................... 3
FILM 2B History of Cinema 1960-Present ........................................... 3
LING 10/10H Introduction to Language, or Honors Introduction to Language ........................................... 3
PHIL 1A/1AH Theories of Knowledge and Reality, or Honors Theories of Knowledge and Reality ........................................... 3
PHIL 1B Social and Political Philosophy ........................................... 3
PHIL 1C/1CH Ethics, or Honors Ethics ........................................... 3
PHIL 3A Ancient Philosophy ........................................... 3
PHIL 3B Modern Philosophy ........................................... 3
PORT 2 High-Beginning Portuguese ........................................... 5
SPAN 2 High-Beginning Spanish ........................................... 5
SPAN 2NS Preparatory Spanish for Native Speakers ........................................... 5
SPAN 3 Intermediate Spanish ........................................... 5
SPAN 3NS Intermediate Spanish for Spanish Speakers ........................................... 5
SPAN 4 High-Intermediate Spanish ........................................... 5
SPAN 4NS High-Intermediate Spanish for Spanish Speakers ........................................... 5
SPAN 5 The Short Story: Mexico, Spain, and the U.S. ........................................... 4
SPAN 6 The Short Story: Latin America ........................................... 4
SPAN 7 Advanced Spanish: Composition and Grammar ........................................... 4
SPAN 41 Introduction to Poetry in Spanish ........................................... 4
SPAN 42 Hispanic American Culture ........................................... 4

AREA 4: Social and Behavioral Sciences – At least three courses from at least two different disciplines (nine semester units minimum)
Group 4 – Social Sciences Units

ANTHRO 12 Visual Anthropology: Introduction to Ethnographic Film ........................................... 3
ASAMER 10 Hmong Culture ........................................... 3
ASAMER 25 Asian American Social Issues ........................................... 3
CLS 30 Migration and the Family: Social and Psychological Perspectives ........................................... 3
GLST 1 Introduction to Global Studies ........................................... 3
GLST 2 Global Issues ........................................... 3
WSTS 22 History of American Women ........................................... 3

Group 4A – Anthropology and Archaeology Units

ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology ........................................... 3
ANTHRO 3 Archaeology and World Prehistory ........................................... 3
ANTHRO 4 Introduction to Archaeology ........................................... 3
ANTHRO 8 Language and Culture ........................................... 3

Group 4B - Economics Units

ECON 40/40H Introduction to Microeconomics, or Honors Introduction to Microeconomics ........................................... 3
ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Macroeconomics ........................................... 3

Group 4C – Ethnic Studies Units

AFRAM 1 Introduction to African American Studies ........................................... 3
AFRAM/HIST 34 History of the American Civil Rights Movement ........................................... 3
AMIND 31 American Indian Culture ........................................... 3
AMIND 34 The American Indian in Contemporary Society ........................................... 3
ASAMER 15 Introduction to Asian-Americans ........................................... 3
CLS 11 Introduction to Chicano-Latino Studies ........................................... 3
JOURN 16 Race, Gender and the Media ........................................... 3

Group 4D – Gender Studies Units

HIST 22 History of American Women ........................................... 3
JOURN 16 Race, Gender and the Media ........................................... 3
WSTS 10 Changing Roles of Women ........................................... 3
WSTS 47 Introduction to Lesbian and Gay Studies ........................................... 3

Group 4E - Geography Units

GEOG 2 Cultural Geography ........................................... 3
GEOG 4A World Geography ........................................... 3
GEOG 4B World Geography ........................................... 3
GEOG 20 Geography of California ........................................... 3

Group 4F – History Units

AFRAM 4 Classical and Pre Colonial Africa ........................................... 3
HIST 3 History of Ancient Rome ........................................... 3
HIST 11 History of the United States to 1877 ........................................... 3
### General Education

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<th>Course Title</th>
<th>Units</th>
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<tbody>
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<td>HIST 12/12H</td>
<td>History of the United States since 1877, or Honors History of the United States since 1877</td>
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<tr>
<td>HIST 15</td>
<td>History of the British Isles</td>
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</tr>
<tr>
<td>HIST 17</td>
<td>History of the Muslim World to 1405</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18</td>
<td>History of Ancient Greece</td>
<td>3</td>
</tr>
<tr>
<td>HIST 20</td>
<td>World History I, to 1600</td>
<td>3</td>
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<tr>
<td>HIST 21</td>
<td>United States Civil War</td>
<td>3</td>
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<td>HIST 22</td>
<td>History of American Women</td>
<td>3</td>
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<tr>
<td>HIST 23</td>
<td>World History II, since 1500</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/CLS 29</td>
<td>History Of Mexico, Colonial to Contemporary Period</td>
<td>3</td>
</tr>
<tr>
<td>HIST 30</td>
<td>California History</td>
<td>3</td>
</tr>
<tr>
<td>HIST/AFRAM 34</td>
<td>History of the American Civil Rights Movement</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Group 4G – Interdisciplinary, Social & Behavioral Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV 30</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 1</td>
<td>Introduction to Mass Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Group 4H – Political Science, Government & Legal Institutions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST 11</td>
<td>Law and Democracy</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 1</td>
<td>Modern Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2/2H</td>
<td>American Government, or Honors American Government</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 3</td>
<td>Introduction to Political Theory and Thought</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 5</td>
<td>Comparative Government</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 24</td>
<td>International Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Group 4I – Psychology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDEV/PSY 38</td>
<td>Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY 39</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>General Psychology, or Honors General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Group 4J – Sociology & Criminology

<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>SOC 1A/1AH</td>
<td>Introduction to Sociology, or Honors Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Minority Groups</td>
<td>3</td>
</tr>
</tbody>
</table>

#### 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 10</td>
<td>Basic Astronomy</td>
<td>3</td>
</tr>
<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>CHEM 3A</td>
<td>Introductory General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 8A</td>
<td>Elementary Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 28A</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 28B</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 1</td>
<td>Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 7</td>
<td>Physical Geography: Earth's Surface</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 8</td>
<td>Physical Geography: Weather and Climate</td>
<td>4</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 4</td>
<td>Geology of California</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 5</td>
<td>Introduction to Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 12</td>
<td>Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2A</td>
<td>General Physics 1</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2B</td>
<td>General Physics 2</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4A</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4B</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4C</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 11</td>
<td>Introductory Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 1</td>
<td>Biological Anthropology</td>
<td>3</td>
</tr>
<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 11A</td>
<td>Biology for Science Majors I</td>
<td>5</td>
</tr>
<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>
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<tr>
<td>BIOL 55</td>
<td>Introduction to the Biology of Humans</td>
<td>3</td>
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<tr>
<td>ANTHRO 1L</td>
<td>Biological Anthropology Laboratory</td>
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<tr>
<td>CHEM 1A</td>
<td>General Chemistry</td>
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</tr>
<tr>
<td>CHEM 3A</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
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<tr>
<td>CHEM 29A</td>
<td>Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 29B</td>
<td>Organic Chemistry Lab II</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 1</td>
<td>Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2L</td>
<td>Historical Geology Lab</td>
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<tr>
<td>PHYS 4A</td>
<td>Physics for Scientists and Engineers</td>
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<tr>
<td>PHYS 4B</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4C</td>
<td>Physics for Scientists and Engineers</td>
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</tr>
</tbody>
</table>

#### AREA 6A: UC Requirement in Language Other Than English - Proficiency equivalent to two years of high school study in same language with “C” or better grades (at Fresno City College one course required if not met by high school foreign language).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMEN 1</td>
<td>Beginning Armenian</td>
<td>5</td>
</tr>
<tr>
<td>ARMEN 2</td>
<td>High-Beginning Armenian</td>
<td>5</td>
</tr>
<tr>
<td>ASL 1</td>
<td>Beginning American Sign Language</td>
<td>4</td>
</tr>
</tbody>
</table>
GEOGRAPHY FOR TRANSFER – MAJOR #6072

An Associate in Geography for transfer is designed for students planning to complete a bachelor's degree in Geography at a CSU. Geography explores Earth's landscapes and the physical processes shaping them as well as human relationships with the environment. Geographic inquiry bridges the Social and Natural sciences, and is rooted in spatial analysis of phenomena. Within geography there are a number of sub-disciplines, ranging from climatology and geomorphology to the study of human cultures, migrations, economies, and urban environments. Geographers study the interaction of people with the natural environment, as well as the impacts of people and their activities shape, and are in turn shaped, by the natural environment. Cultural Geography focuses on the spatial organization of the societies at scales ranging from the local to the global, utilizing different time scales. Geographic analysis, particularly through the use of Geographic Information Systems (GIS), is used to address a wide range of issues and problems of the modern world. The Associate in Geography is composed of a core set of introductory Geography courses that assist students in developing critical thinking and spatial analysis skills. It also provides students with a solid foundation for pursuing further study in related majors. To earn the Associate in Geography degree for transfer, students must complete (60) required semester units of CSU-transferable coursework, 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. 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. Define and provide examples of basic geographical concepts in physical and human geography. (For example: plate tectonics, culture hearths and diffusion.)

2. Describe physical processes by which surface features are formed and shaped, (e.g. climate; landforms) and human geography (e.g. religion; population).

3. Explain how geographical factors have shaped historical and current patterns of physical and human geography. (For example, how plate tectonics influences the location and shape of the continents, or how environment and economics have influenced migration and settlement patterns)

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 1</td>
<td>Physical Geography</td>
<td>4</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>
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<td>TOTAL</td>
<td></td>
<td>38-45</td>
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</tbody>
</table>

LIST A: Select Two Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 8</td>
<td>Physical Geography: Weather and Climate</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 20</td>
<td>Geography of California</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>19-20</td>
</tr>
</tbody>
</table>
GEOL0GY 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  Units
CHEM 1A  General Chemistry ................................................ 5
CHEM 1B  General Chemistry and Qualitative Analysis ......... 5
GEOL 1  Physical Geology ................................................. 4
GEOL 2  Historical Geology ................................................ 3
GEOL 2L  Historical Geology Lab ......................................... 1
MATH 5A  Mathematical Analysis I ............................... 5
MATH 5B  Mathematical Analysis II ............................... 4

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)

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  Units
GLST 1  Introduction to Global Studies......................... 3
GLST 2  Global Issues .................................................... 3
List A: Select five courses from at least four of the following areas.
Area 1: Culture and Society Units
ANTHRO 2  Cultural Anthropology .......................................... 3
HIST 23  World History II, since 1500 ................................. 3
Area 2: Geography Units
GEOG 1  Physical Geography ........................................... 4
GEOG 2  Cultural Geography ........................................... 3
GEOG 4A  World Geography, and
GEOG 4B  World Geography ........................................... 6
Area 3: Economics Units
ECON 40/40H  Introduction to Microeconomics, or
Honors Introduction to Microeconomics ............. 3
ECON 50/50H  Introduction to Macroeconomics, or
Honors Introduction to Macroeconomics ............. 3
Area 4: Politics
POLSCI 5 Comparative Government.............................. 3
POLSCI 24 International Relations................................. 3

Area 5: Humanities
ENGL 44A Survey of World Literature to the Mid-Seventeenth Century............................... 3
ENGL 44B Survey of World Literature from Mid-Seventeenth Century to 1950....................... 3
FRENCH 3 Intermediate French, or SPAN 3 Intermediate Spanish............................... 5

Total 21-26

GRAPHIC COMMUNICATIONS

GRAPHIC DESIGN - FORMERLY GRAPHIC DESIGN OPTION
– MAJOR #8507

Graphic Design combines aspects of the graphic communication and business curricula to provide a foundation in graphic design. The student will receive a background in computer graphics, and introductory video, audio and web design with an understanding of the requirements and limitations of production.

ASSOCIATE OF 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

BA 38 Operation of the Small Business, or BA 52 Introduction to Entrepreneurship ................ 3
GRC 15 Web Design..................................................... 4
GRC 17 Adobe Illustrator............................................. 3
GRC 20A Intro to Applied Graphics – Adobe Tools ....... 3
GRC 20B Intro to Applied Graphics – Media ................. 3
GRC 30 Adobe InDesign/Professional Publishing ........... 3
GRC 31 Intermediate Photoshop.................................. 3
GRC 39A Introduction to Graphic Design ...................... 3
GRC 40A Intermediate Graphic Design ......................... 3
GRC 55 Social Media Design........................................ 2

Total 30

GRAPHIC DESIGN - MAJOR #8507

This non-credit program provides a foundation in Graphic Design. The student will receive a background in computer graphics, and introductory video, audio and web design with an understanding of the requirements and limitations of production.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Demonstrate competency in communications techniques and visual design theory through the use of application specific software and hardware.

REQUIRED COURSES

GRC 315 Web Design................................................. 108
GRC 317 Adobe Illustrator............................................. 90
GRC 320A Intro to Applied Graphics – Adobe Tools ...... 90
GRC 320B Intro to Applied Graphics – Media ................. 90
GRC 330 Adobe InDesign/Professional Publishing ........... 90
GRC 331 Intermediate Photoshop.................................. 90
GRC 339A Introduction to Graphic Design ...................... 90
GRC 340A Intermediate Graphic Design ......................... 90

Total 738

DIGITAL VIDEO – FORMERLY DIGITAL VIDEO OPTION
– MAJOR #8509

This certificate prepares the student for entry level work in digital video production.

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

GRC 23 Video Editing – Adobe Premiere Pro .................. 3
GRC 27 Digital Video Production.................................. 3
GRC 32 Cinematography.............................................. 3
GRC 51 Storyboarding................................................ 1
GRC 53 Adobe After Effects........................................ 3

Total 13
DIGITAL MEDIA – FORMERLY DIGITAL MEDIA OPTION
AND MULTIMEDIA OPTION - MAJOR #8508

This certificate provides evidence of knowledge in the preparation of images and audio for multimedia output.

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>
</tr>
</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</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>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

DIGITAL MEDIA - MAJOR #8508

This non-credit certificate provides evidence of knowledge in the preparation of images and audio for multimedia output. The non-credit feature allows students to stay abreast of near-constant change within the Digital Media realm.

CERTIFICATE OF COMPLETION

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>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 315</td>
<td>Web Design</td>
<td>108</td>
</tr>
<tr>
<td>GRC 322</td>
<td>Digital Media</td>
<td>90</td>
</tr>
<tr>
<td>GRC 324A</td>
<td>Intro 2-D Animation with Adobe Animate</td>
<td>90</td>
</tr>
<tr>
<td>GRC 334</td>
<td>Introduction to 3-D Animation</td>
<td>90</td>
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<tr>
<td>GRC 341</td>
<td>Visual Communication</td>
<td>90</td>
</tr>
<tr>
<td>GRC 347</td>
<td>Introduction to Media Appreciation</td>
<td>54</td>
</tr>
<tr>
<td>GRC 351</td>
<td>Storyboarding</td>
<td>18</td>
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<tr>
<td>GRC 353</td>
<td>Adobe After Effects</td>
<td>90</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>630</strong></td>
</tr>
</tbody>
</table>

MOTION GRAPHICS - MAJOR #8512

Motion graphic skill development in basic design, 2-D and 3-D animation using Adobe Creative Cloud suite and others. Use of Blender, Adobe Animate, and Adobe After Effects software are featured.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcome:
1. Demonstrate competency in communications 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>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 24A</td>
<td>Intro 2-D Animation with Adobe Animate</td>
<td>3</td>
</tr>
<tr>
<td>GRC 31</td>
<td>Intermediate Photoshop</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 47</td>
<td>Introduction to Media Appreciation</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>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
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</table>

MOTION GRAPHICS - MAJOR #8512

Motion graphic skill development in basic design, 2-D and 3-D animation using Adobe Creative Cloud suite and others. Use of Blender, Adobe Animate, and Adobe After Effects software are featured.

CERTIFICATE OF COMPLETION

Student Learning Outcome:
1. Demonstrate competency in communications 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>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 324A</td>
<td>Intro 2-D Animation with Adobe Animate</td>
<td>90</td>
</tr>
<tr>
<td>GRC 331</td>
<td>Intermediate Photoshop</td>
<td>90</td>
</tr>
<tr>
<td>GRC 334</td>
<td>Introduction to 3-D Animation</td>
<td>90</td>
</tr>
<tr>
<td>GRC 341</td>
<td>Visual Communication</td>
<td>90</td>
</tr>
<tr>
<td>GRC 347</td>
<td>Introduction to Media Appreciation</td>
<td>54</td>
</tr>
<tr>
<td>GRC 351</td>
<td>Storyboarding</td>
<td>18</td>
</tr>
<tr>
<td>GRC 353</td>
<td>Adobe After Effects</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>522</strong></td>
</tr>
</tbody>
</table>
Social Media Content Design - Major #8513

An inter-disciplinary approach to social media content creation featuring components of Graphic Communication, Photography, Business Administration, and Marketing.

Certificate of Achievement

Student Learning Outcome:
1. Develop social media for various platforms adhering to specification and design concepts.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 5</td>
<td>Workplace Communication</td>
<td>3</td>
</tr>
<tr>
<td>BA 52</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>GRC 27</td>
<td>Digital Video Production</td>
<td>3</td>
</tr>
<tr>
<td>GRC 51</td>
<td>Storyboarding</td>
<td>1</td>
</tr>
<tr>
<td>GRC 55</td>
<td>Social Media Design</td>
<td>2</td>
</tr>
<tr>
<td>MKTG 21</td>
<td>Digital Marketing</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 14</td>
<td>Photography for Social Media</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Video Production - Major #8511

This comprehensive program features pre-production planning, camera and audio work, post-production editing techniques and technology to complete digital video projects.

Certificate of Achievement

Student Learning Outcome:
1. Demonstrate competency in communications 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>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRC 322</td>
<td>Digital Media</td>
<td>90</td>
</tr>
<tr>
<td>GRC 323</td>
<td>Video Editing - Adobe Premiere Pro</td>
<td>90</td>
</tr>
<tr>
<td>GRC 327</td>
<td>Digital Video Production</td>
<td>90</td>
</tr>
<tr>
<td>GRC 331</td>
<td>Intermediate Photoshop</td>
<td>90</td>
</tr>
<tr>
<td>GRC 332</td>
<td>Cinematography</td>
<td>90</td>
</tr>
<tr>
<td>GRC 338</td>
<td>Video Post Production</td>
<td>36</td>
</tr>
<tr>
<td>GRC 347</td>
<td>Introduction to Media Appreciation</td>
<td>54</td>
</tr>
<tr>
<td>GRC 351</td>
<td>Storyboarding</td>
<td>18</td>
</tr>
<tr>
<td>GRC 353</td>
<td>Adobe After Effects</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>648</strong></td>
</tr>
</tbody>
</table>

Health Information Technology - Formerly Health Information Technology: Revenue Management and Medical Record Technology – Major #4623

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 traditional medical information. Through the use of technology and expertise in data integrity, confidentiality, and security, their work contributes to quality patient care.

The curriculum provides emphasis in revenue management for a career in coding, auditing, and clinical documentation improvement, while also providing foundational knowledge in general health information management for job responsibilities that may include data collection, documentation analysis, release of information, or supervision.

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

<table>
<thead>
<tr>
<th>First Semester – Fall</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIOL 5</td>
<td>Human Biology, or</td>
</tr>
<tr>
<td>BIOL 55</td>
<td>Introduction to the Biology of Humans</td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
</tr>
<tr>
<td>HIT 1</td>
<td>Introduction to Health Information</td>
</tr>
<tr>
<td>HIT 10</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester - Spring</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 2</td>
<td>Legal Aspects of Health Information</td>
</tr>
<tr>
<td>HIT 4</td>
<td>Disease Process</td>
</tr>
<tr>
<td>HIT 5</td>
<td>ICD Coding: Diagnoses</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester - Fall</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 6</td>
<td>ICD Coding: Procedures</td>
</tr>
<tr>
<td>HIT 14</td>
<td>HIM Technology and Systems</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Semester - Spring</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 8</td>
<td>Health Information Management and Supervision</td>
</tr>
<tr>
<td>HIT 11</td>
<td>CPT Coding</td>
</tr>
<tr>
<td>HIT 16</td>
<td>Healthcare Reimbursement</td>
</tr>
</tbody>
</table>

**Total 42-43**

### Notes:
1. The associate degree requires the completion of the program requirements with a 2.0 or higher GPA.
2. BIOL 20 and 22, 21A and 21B, or 24 may be substituted for BIOL 5 or BIOL 55.
3. In addition to the required program courses, all requirements for the Associate Degree in Science must be met. Refer to the Fresno City College Catalog section on certificate and degree requirements for advisement.
4. Academic credit earned in accredited institutions of higher education 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.

### 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

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BIOL 5</td>
<td>Human Biology, or</td>
</tr>
<tr>
<td>BIOL 55</td>
<td>Introduction to the Biology of Humans</td>
</tr>
<tr>
<td>HIT 1</td>
<td>Introduction to Health Information</td>
</tr>
<tr>
<td>HIT 10</td>
<td>Medical Terminology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
</tr>
<tr>
<td>HIT 4</td>
<td>Disease Process</td>
</tr>
<tr>
<td>HIT 5</td>
<td>ICD Coding: Diagnoses</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 6</td>
<td>ICD Coding: Procedures</td>
</tr>
<tr>
<td>HIT 14</td>
<td>HIM Technology and Systems</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 11</td>
<td>CPT Coding</td>
</tr>
<tr>
<td>HIT 15</td>
<td>Medical Coding Directed Practice</td>
</tr>
<tr>
<td>HIT 16</td>
<td>Healthcare Reimbursement</td>
</tr>
</tbody>
</table>

**Total 33-34**

*Note: * BIOL 20 and 22, or 21A and 21B, or 24 may be substituted for BIOL 5

### HEATING, VENTILATION, AND AIR CONDITIONING – FORMERLY AIR CONDITIONING

#### HVAC TECHNOLOGY II

– FORMERLY HVAC TECHNOLOGY III AND AIR CONDITIONING – MAJOR #8042

Students who successfully complete the HVAC Technology II program have been equipped with skills for employment as HVAC (Heating, Ventilation, and Air Conditioning) maintenance, diagnostic, and installation technicians. The curriculum incorporates cognitive and hands-on assignments that develop a fundamental understanding of the installation, operation, and troubleshooting of HVAC equipment and air distribution systems. Additional emphasis on communication skills and general education prepare students for leadership roles once several years of work experience have been achieved.

### ASSOCIATE OF SCIENCE DEGREE

**Student Learning Outcomes:**
1. Analyze and strategically document air, refrigerant, fuel, and electrical measurements in the diagnosis and repair of heating and cooling equipment.
2. Demonstrate HVAC skills through the achievement of applicable industry certification(s).
3. Prepare for a leadership role in the HVAC industry upon achievement of work experience.
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 skills for entry-level employment as HVAC (Heating, Ventilation, and Air Conditioning) maintenance, diagnostic, and installation technicians. The curriculum incorporates cognitive and hands-on assignments that develop a fundamental understanding of the installation, operation, and troubleshooting of HVAC equipment and air distribution systems.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Analyze air, refrigerant, fuel, and electrical measurements in the diagnosis and repair of heating and cooling equipment.
2. Demonstrate a familiarity with the main figures, events and concepts in the histories of multiple societies.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC 50 Principles of HVAC</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 51 Electricity for HVAC</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 52 Heating Systems</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 53 System Analysis and Regulations</td>
<td>6.5</td>
</tr>
<tr>
<td>HVAC 54 Brazing and Motor Technology</td>
<td>6.5</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
</tr>
</tbody>
</table>

RETA-CARO CERTIFICATION READY – MAJOR #8044

Upon completion of required courses, the RETA-CIRO Certification Ready certificate holder is prepared for successful completion of the CARO (Certified Refrigeration Operator) exam by RETA (Refrigeration Engineers and Technicians Association). CARO is a highly acclaimed industrial refrigeration certification, which qualifies refrigeration technicians to work as an apprentice with a CIRO (Certified Industrial Refrigeration Operator) journeyman. Of all the refrigeration sectors, the industrial refrigeration sector often offers the refrigeration technician the greatest responsibility coupled with appealing compensation packages.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Successful completion of the Refrigeration Engineers and Technicians Association (RETA) Industrial Refrigeration I - Electronic Test.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC 350 RETA/CARO Ready - EPA Section 608 Technician Certification</td>
<td>54</td>
</tr>
<tr>
<td>HVAC 351 RETA/CARO Ready - Industrial Refrigeration I</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 11 History of the United States to 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 12 History of the United States since 1877</td>
<td>3</td>
</tr>
<tr>
<td>LIST A - Select one of the following:</td>
<td>Units</td>
</tr>
<tr>
<td>HIST 1 Western Civilization to 1648</td>
<td>3</td>
</tr>
<tr>
<td>HIST 20 World History I, to 1600</td>
<td>3</td>
</tr>
<tr>
<td>LIST B - Select one of the following:</td>
<td>Units</td>
</tr>
<tr>
<td>HIST 2 Western Civilization since 1648</td>
<td>3</td>
</tr>
<tr>
<td>HIST 23 World History II, since 1500</td>
<td>3</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 History of the Muslim World to 1405</td>
<td>3</td>
</tr>
<tr>
<td>HIST 20 World History I, to 1600</td>
<td>3</td>
</tr>
<tr>
<td>HIST/WSTS 22 History of American Women</td>
<td>3</td>
</tr>
<tr>
<td>HIST 23 World History II, since 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 29 History of Mexico, Colonial to Contemporary Period</td>
<td>3</td>
</tr>
<tr>
<td>HIST/AFRAM 34 History of the American Civil Rights Movement</td>
<td>3</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 History of Ancient Rome</td>
<td>3</td>
</tr>
<tr>
<td>HIST 15 History of the British Isles</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18 History of Ancient Greece</td>
<td>3</td>
</tr>
<tr>
<td>HIST 21 United States Civil War</td>
<td>3</td>
</tr>
<tr>
<td>HIST 25 History of Religion in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 30 California History</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 16

HONORS PROGRAM

LEON S. PETERS HONORS PROGRAM – MAJOR #5331

A Leon S. Peter Certificate in Honors will be awarded to Honors students who successfully complete a minimum of 16 credits of Honors courses including one colloquium unit with an overall GPA of 3.2 or better.

CERTIFICATE OF ACHIEVEMENT

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.

ELECTIVE COURSES: 16 units including at least one colloquium unit (i.e. Honors 1A, 1B, 1D, 1E, 1F)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 6H Honors Art History Renaissance to Modern</td>
<td>3</td>
</tr>
<tr>
<td>COMM 8H Honors Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40H Honors Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 50H Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1AH Honors Reading and Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 3H Honors Critical Reading &amp; Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 12H Honors History of the United States since 1877</td>
<td>3</td>
</tr>
<tr>
<td>HONORS 1A Honors Science Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1C Honors Humanities Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1D Honors Business &amp; Economics Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1E Honors Social Science Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>HONORS 1F Honors Phi Theta Kappa Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>MATH 11H Honors Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 1AH Honors Theories of Knowledge and Reality</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1CH Honors Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2H Honors Critical Reasoning and Analytic Writing</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2H Honors American Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2H Honors General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1AH Honors Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 16

HUMAN SERVICES

ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION – MAJOR #7951

This degree is designed for students interested in working in the field of Substance Use Disorders. 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 (CAADE) and recognized by the other counselor certification organizations in California.

The degree offers course work leading to a certificate of achievement, and an AS degree in Alcoholism and Drug Abuse Counseling.

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:

1. Demonstrate a fundamental working knowledge of the Substance Use Disorder Treatment system.
2. Be prepared for entry-level employment in a Substance Use Disorder 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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS/SOC 10 Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 18 Alcohol and Drug Abuse Counseling: Professional and Personal Growth</td>
<td>2</td>
</tr>
</tbody>
</table>
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 3 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/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 and Personal Growth</td>
<td>2</td>
</tr>
<tr>
<td>HS 19B</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>6</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 24</td>
<td>Fund of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 40</td>
<td>Alcohol and Drug Abuse Counseling: Law and Ethics, Prevention, Education, Outreach and Referral</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: Case Management</td>
<td>3</td>
</tr>
<tr>
<td>HS 44</td>
<td>Drug Use: Physical and Psychological Effects</td>
<td>3</td>
</tr>
</tbody>
</table>

COURSE OPTIONS: Select 3 Courses

<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></td>
</tr>
<tr>
<td>AMIND 34</td>
<td>American Indian in Contemporary Society</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 Honors General Psychology</td>
<td>3</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>
<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>
<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 2</td>
<td>American Minority Groups</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>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 37-38

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 37-38 units of course work in the major as listed above.
2. Associate degree requirements are listed on page 39. General Education requirements for transfer certification are on page 39.

ALCOHOLISM AND DRUG ABUSE COUNSELING OPTION – MAJOR #7951

This certificate is designed for students interested in working in the field of substance use disorders. 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.
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, 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 10 Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 11 Elder Care Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HS 19A Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>HS 20 Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 24 Fundamentals of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 44 Drug Use: Physical and Psychological Effects</td>
<td>3</td>
</tr>
<tr>
<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 OF 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 12 Computer Literacy, or AT 10 Technical Computer Applications, or BT 1 Computer Document Processing I, or CIT 15 Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HS/SOC 10 Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 19A Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>HS 20 Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>HS 24 Fundamentals of Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HS 30 Group and Community Social Services</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Options: Select 12 Units</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1 Introduction to African American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 2 African American Cultural Adaptation</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 31 American Indian Culture</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 34 The American Indian in Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2/2H Cultural Anthropology, or Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 25 Asian American Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>ASL 1 Beginning American Sign Language</td>
<td>4</td>
</tr>
<tr>
<td>CHDEV 5 Parent Education</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 30 Child, Family and Community, or SOC 31 Child in Society: A Social Problems Approach</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY 38 Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY39 Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CLS 11 Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>CLS 13 Politics and the Chicano-Latino Community</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1 Introduction to Public Speaking, or COMM 4 Persuasion, or COMM 8 Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMM 25 Argumentation, or PHIL 6 Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>ECON 25 Introduction to Economics, or ECON 40/40H Introduction to Microeconomics, or</td>
<td>3</td>
</tr>
<tr>
<td>ECON 50/50H Introduction to Macroeconomics, or Honors Introduction to Microeconomics, or Honors Introduction to Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ETHNST 10 Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
<tr>
<td>FN 35 Nutrition and Health, or FN/WSTS 43 Women's Nutrition</td>
<td>2-3</td>
</tr>
</tbody>
</table>
HMONG 1 Beginning Hmong ........................................... 5
HS/WSTS 25 Assertiveness Training ................................ 2
HS 44 Drug Use: Physical and Psychological Effects .......... 3
PHIL 1A/1AH Theories of Knowledge and Reality, or
Honors Theories of Knowledge and Reality, or
PHIL 1C/1CH Ethics, or
Honors Ethics ...................................................... 3
SOC 1A/1AH Introduction to Sociology, or
Honors Introduction to Sociology ................................ 3
SOC/WSTS 5 Sociology of Rape ......................................... 3
SOC/WSTS 7 Domestic Violence: Abuse Within the Family .... 3
SOC 32 Introduction to Marriage and Family .................. 3
SPAN 1 Beginning Spanish ........................................... 5
WSTS 10 Changing Roles of Women ............................... 3

Total Units 30

Note: An associate in science degree will be awarded on the successful completion of 60 units. See page 39 for associate degree requirements. General education requirements for transfer certification are on page 39.

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 underserved 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></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</td>
</tr>
</tbody>
</table>

For career options, consult with Human Services staff.
SOCIAL WORK AND HUMAN SERVICES FOR TRANSFER – MAJOR #7635

An Associate in Arts in Social Work and Human Services for Transfer degree, is designed for students who plan to complete a Bachelor’s degree in a similar major at a CSU campus. The degree will acquaint students with the fundamentals of the human services system and the profession of Social Work, including introduction to the theories, principles, and values on which human services are offered and social work is practiced in the United States. To earn the Associate of Arts in Social Work/Human Services 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 necessary to complete the transfer degree. Students should consult with a knowledgeable academic counselor for more information on transfer requirements and university admission.

ASSOCIATE IN ARTS DEGREE

Student Learning Outcomes:

1. Demonstrate a fundamental working knowledge of the social services system and social work as a profession.
2. Be prepared for entry level employment in a social services setting.
3. Apply the multiple perspectives of a broad liberal arts foundation to understanding and responding to human needs and social problems.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20/21A/21B</td>
<td>4-9</td>
</tr>
<tr>
<td>ECON 40/40H</td>
<td>3</td>
</tr>
<tr>
<td>ECON 50/50H</td>
<td>3</td>
</tr>
<tr>
<td>HS 19A</td>
<td>3</td>
</tr>
<tr>
<td>HS 20</td>
<td>3</td>
</tr>
<tr>
<td>MATH 11</td>
<td>3</td>
</tr>
<tr>
<td>MATH 42</td>
<td>4</td>
</tr>
<tr>
<td>PSY 2/2H</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1A/AH</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST A - Select two (2) courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 2/2H</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 30</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY 38</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV/PSY 39</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3/3H</td>
<td>3</td>
</tr>
<tr>
<td>PSY 16</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1B</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 29-34

INDUSTRIAL TECHNOLOGY

INDUSTRIAL TECHNOLOGY, CONSTRUCTION EMPHASIS – MAJOR #8993

This degree is designed for students that have a desire to learn about the different subject areas with a Construction Emphasis within the Applied Technology Division. This could prepare the student to transfer to a four-year university and earn a Bachelor of Science degree in Industrial Technology.

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:

1. Students will be able to build various projects utilizing the skill they obtained in other courses.
2. Students will gain knowledge in the areas of Architecture, Construction, Drafting, Electricity and Welding. Allowing them to teach these areas in secondary education.
3. Create and modify files using Microsoft Office programs.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 21</td>
<td>2</td>
</tr>
<tr>
<td>CONS 50A</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12</td>
<td>3</td>
</tr>
<tr>
<td>CADD 14</td>
<td>3</td>
</tr>
</tbody>
</table>

RECOMMENDED ELECTIVES (10 UNITS MINIMUM)

<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>2</td>
</tr>
<tr>
<td>ARCH 14</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 21</td>
<td>3</td>
</tr>
<tr>
<td>CADD 16</td>
<td>3</td>
</tr>
<tr>
<td>CONS 50B</td>
<td>3</td>
</tr>
<tr>
<td>EST 50</td>
<td>3</td>
</tr>
<tr>
<td>EST 53</td>
<td>2</td>
</tr>
<tr>
<td>HVAC 50</td>
<td>2</td>
</tr>
<tr>
<td>WELD 1</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18
INDUSTRIAL TECHNOLOGY, MANUFACTURING EMPHASIS – FORMERLY INDUSTRIAL TECHNOLOGY AND INDUSTRIAL ARTS AND TECHNOLOGY - MAJOR #8994

This degree is designed for students that have a desire to learn about the different subject areas with a Manufacturing Emphasis within the Applied Technology Division. This could prepare the student to transfer to a four-year university and earn a Bachelor of Science degree in Industrial Technology.

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:
1. Students will gain knowledge in the areas of Architecture, Automotive, Construction, Drafting, Electricity and Welding. Allowing them to teach these areas in secondary education.
2. Create and modify files using Microsoft Office programs.

REQUIRED COURSES Units
AT 10 Technical Computer Applications ......................... 3
CADD 16 3D Solid Modeling I ............................................. 3
WELD 1 Exploring Welding/Metals .................................... 3

RECOMMENDED ELECTIVES (9 UNITS MINIMUM) Units
AUTOT 9 Automotive Essentials .......................................... 3
CADD 14 2D CAD I .............................................................. 3
CAM 5 CNC Operation & Maintenance for Machinist .................. 2.5
CAM 10 CNC Mill Programming & Operation I ....................... 4
DRAFT 12 Drafting Practices ............................................... 3
ENGR 10 Introduction to Engineering ................................... 2
ENGR 11 Manufacturing Processes ..................................... 3
EST 51 Direct Current Fundamentals of Electronics ................. 3
EST 52 Alternating Current Fundamentals ............................ 3
EST 53 Lab Safety Practices ............................................... 2
EST 54 Integrated Devices ................................................... 3
EST 55A Digital Concepts ...................................................... 3
EST 56B Motor Controls ...................................................... 3
EST 58 Programmable Logic Controllers ............................... 3
EST 59 Instrumentation Systems ........................................... 3
EST 60 A+ PC Maintenance and Repair ................................. 3
EST 61 Networking Fundamentals ........................................ 3
EST 62 Commercial & Industrial Networking ......................... 3
WELD 2A Introduction to Welding Technology ....................... 6

Total 18

INDUSTRIAL TRAINING – MAJOR #852V

This program prepares its graduates for employment at any company requiring warehousing skills such as forklift and electric pallet jack operation, math, and basic computer skills.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Perform basic operation exercises on two sit-down propane forklifts, a stand-up electric lift and an electric pallet jack safely and effectively according to industry standards as determined by the instructor.
2. Demonstrate the ability to conduct himself/herself in a professional manner while working as team member in accordance with industry standards as determined by the instructor.
3. Demonstrate the ability to perform typical duties and solve typical problems in a warehouse environment in accordance with industry standards as determined by the instructor.

REQUIRED CORE COURSES Hours
ITCTC 371 Warehouse & Distribution Careers ......................... 90
ITCTC 372 Warehouse & Distribution Careers ......................... 90
Total 180

JOURNALISM

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.

CORE COURSES (3 courses or 9 units): Units
JOURN 1 Introduction to Mass Communication ...................... 3
JOURN 3 Newswriting ......................................................... 3
JOURN 11A Beginning Media Writing Practicum ..................... 3
KINESIOLOGY

KINESIOLOGY – MAJOR #4555

Kinesiology studies the function and performance of the human body through 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, first aid, 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 of 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.

ASSOCIATE OF SCIENCE DEGREE

Student Learning Outcomes:

1. After completion of this program, students will understand the importance of physical activity and its impact on health, society, and quality of life.
2. This field of study prepares students for a career of lifelong learning and development in the field of Kinesiology.

LIST A - Select 3 units or 1 course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 14 Multimedia Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST B - Select 6-7 units or 2 courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1 Introduction to Public Speaking</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>3-4</td>
</tr>
<tr>
<td>MATH 11 Elementary Statistics, or</td>
<td></td>
</tr>
<tr>
<td>DS 23 Business Statistics</td>
<td></td>
</tr>
<tr>
<td>PHIL 6 Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>POLSCI 2/2H American Government, or Honors American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18-19

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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN 14 Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>PE 20 Care and Prevention in Athletic Populations</td>
<td>3-4</td>
</tr>
<tr>
<td>PE 40C Off-Season Conditioning for Volleyball</td>
<td>1</td>
</tr>
<tr>
<td>PE 41C Off-Season Conditioning for Men’s Wrestling</td>
<td>1</td>
</tr>
<tr>
<td>PE 42C Off-Season Conditioning for Water Polo</td>
<td>1</td>
</tr>
<tr>
<td>PE 43C Off-Season Conditioning for Swimming &amp; Diving</td>
<td>1</td>
</tr>
<tr>
<td>PE 44C Off-Season Conditioning for Sand Volleyball</td>
<td>1</td>
</tr>
<tr>
<td>PE 45 Performance Training and Conditioning Techniques for Intercollegiate Athletics</td>
<td>1</td>
</tr>
<tr>
<td>PE 46C Off-Season Conditioning for Women’s Wrestling</td>
<td>1</td>
</tr>
<tr>
<td>PE 72 Spinning for Fitness</td>
<td></td>
</tr>
</tbody>
</table>

228 Journalism
Individual/Dual Sports: Minimum one course (1-3 units) Units
| PE 4  | Badminton ................................................. 1 |
| PE 4B | Intermediate Badminton .................................. 1 |
| PE 7  | Golf.................................................................. 1 |
| PE 8  | Basic Self Defense ......................................... 1 |
| PE 12 | Swimming ...................................................... 1 |
| PE 12B| Intermediate Swimming .................................... 1 |
| PE 13  | Tennis .......................................................... 1 |
| PE 13B| Intermediate Tennis ....................................... 1 |
| PE 29B| Competitive Badminton .................................... 3 |
| PE 32B| Competitive Cross Country ................................ 3 |
| PE 34B| Competitive Golf ............................................. 3 |
| PE 38B| Competitive Tennis ......................................... 3 |
| PE 39B| Competitive Track and Field ............................ 3 |
| PE 41B| Competitive Men’s Wrestling ....................... 3 |
| PE 43B| Competitive Swimming & Diving ...................... 3 |
| PE 44B| Competitive Sand Volleyball ........................... 3 |
| PE 46B| Competitive Women’s Wrestling .................... 3 |

Team Sports: Minimum one course (1-3 units) Units
| PE 5  | Basketball ................................................... 1 |
| PE 14 | Volleyball .................................................... 1 |
| PE 14B| Intermediate Volleyball .................................. 1 |
| PE 30B| Competitive Baseball ...................................... 3 |
| PE 31B| Competitive Basketball ................................... 3 |
| PE 33B| Competitive Football ..................................... 3 |
| PE 35B| Cheer and Stunt ............................................. 2 |
| PE 36B| Competitive Soccer ....................................... 3 |
| PE 37B| Competitive Softball ..................................... 3 |
| PE 40B| Competitive Volleyball .................................. 3 |
| PE 42B| Competitive Water Polo .................................. 3 |
| PE 71  | Soccer ................................................................ 1 |

Total 18-23

**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**

| BIOL 20 | Human Anatomy, and Physiology I .................. 5 |
| BIOL 22 | Human Physiology, or Physiology II ............... 9 |
| BIOL 21A| Human Anatomy & Physiology I, and Physiology II 6 |
| BIOL 21B| Human Anatomy & Physiology I, and Physiology II 6 |
| HLTH 2 | First Aid and Safety .................................... 3 |

**REQUIREMENT IN ARTS DEGREE**

Select a minimum of 3 different courses from the following for a total of 3 or more units.

| PE 4 | Badminton .................................................. 1 |
| PE 5 | Basketball ................................................... 1 |
| PE 7 | Golf .................................................................. 1 |
| PE 12 | Swimming ...................................................... 1 |
| PE 13 | Tennis .......................................................... 1 |
| PE 14 | Volleyball .................................................... 1 |
| PE 15A| Weight Training (Women) ............................ 1 |
| PE 15B| Weight Training (Men) .................................. 1 |
| PE 15C| Weight Training (Coed) ............................... 1 |
| PE 17 | Hatha Yoga ................................................... 1 |

**ELECTIVES: 3 units**

Select a minimum of 1 course from the following for a total of 3 or more units.

| CHEM 1A | General Chemistry ..................................... 5 |
| DS 23 | Business Statistics ..................................... 3 |
| MATH 11 | Elementary Statistics ............................... 4 |
| PHYS 2A | General Physics 1 ...................................... 4 |

Total 21-23
LAW

LAW, PUBLIC POLICY, AND SOCIETY FOR TRANSFER – MAJOR #8770

The coursework required to earn an Associate in Arts in Law, Public Policy, and Society for Transfer has been identified as good preparation for law school upon completion of a bachelor's degree. This interdisciplinary area of emphasis emphasizes the development of communication skills, introduces students to the legal field, and prepares students for further study in a variety of majors. Students who opt to pursue this course of study are encouraged to engage in further exploration of one or more specific majors as they select electives for degree completion. To earn the Associate in Arts in Law, Public Policy and Society 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 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. Demonstrate independent and critical thinking regarding important topics in law.
2. Demonstrate independent and critical thinking regarding important topics in law.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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, or</td>
<td></td>
</tr>
<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, or</td>
<td></td>
</tr>
<tr>
<td>PHIL 2/2H</td>
<td>Critical Reasoning and Analytic Writing, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Critical Reasoning and Analytic</td>
<td></td>
</tr>
<tr>
<td>COMM 25</td>
<td>Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 6</td>
<td>Concepts of Criminal Law</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>MATH 11/11H</td>
<td>Elementary Statistics, or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honors Elementary Statistics, or</td>
<td></td>
</tr>
<tr>
<td>MATH 42</td>
<td>Statistics for the Behavioral Sciences, or</td>
<td></td>
</tr>
<tr>
<td>DS 23</td>
<td>Business Statistics</td>
<td>3-4</td>
</tr>
</tbody>
</table>

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.

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
- Cultural Studies
- Foreign Languages
- Social Sciences
- Sociology

Complete the minimum number of units required in the “Area of Emphasis”.

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 OF 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</th>
<th>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>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

*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 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 OF ARTS DEGREE

Student Learning Outcomes:

Upon completion of the Associate 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. Develop critical thinking skills.

18 units from any of the following (but no more than 6 units from each discipline)

<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 Adaptation</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 4</td>
<td>Classical and Pre Colonial Africa</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 5</td>
<td>The African Diaspora of the Americas</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 6</td>
<td>African Cultures and Languages</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM/WSTS 41</td>
<td>African-American Women's Studies</td>
<td>3</td>
</tr>
<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>The American Indian in Contemporary Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2/H</td>
<td>Cultural Anthropology, or Honors Cultural</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Anthropology</td>
<td></td>
</tr>
<tr>
<td>ANTHRO/CLS 28</td>
<td>Ancient Mexico</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 1</td>
<td>Indo-Chinese Americans</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 10</td>
<td>Hmong Culture</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 15</td>
<td>Introduction to Asian-Americans</td>
<td>3</td>
</tr>
<tr>
<td>ASAMER 25</td>
<td>Asian American Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>CHDEV 15</td>
<td>Diversity and Culture in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Education Programs</td>
<td></td>
</tr>
<tr>
<td>CLS 11</td>
<td>Introduction to Chicano-Latino Studies</td>
<td>3</td>
</tr>
<tr>
<td>CLS 12A</td>
<td>Mexican American History: From Mesoamerica</td>
<td>3</td>
</tr>
<tr>
<td>CLS 12B</td>
<td>Mexican American History: From the Mexican-American War</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>
</tbody>
</table>
FRENCH 3 Intermediate French .............................................. 5
FRENCH 2 High-Beginning French ........................................ 5
CHIN 2 High-Beginning Chinese ...................................... 5
CHIN 2 High-Beginning Chinese ...................................... 5
GEOG 4A World Geography ................................................. 3
ETHNST 10 Introduction to Ethnic Studies ......................... 3
GEOG 2 Cultural Geography .............................................. 3
GEOG 2 Cultural Geography .............................................. 3
GEOG 20 Geography in California ....................................... 3
POLSCI 24 International Relations........................................ 3
SOC 1B Critical Thinking about Social Problems................. 3
SOC 2 American Minority Groups ................................... 3
WSTS 10 Changing Roles of Women...................................... 3

Total 18

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 OF 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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMEN 2</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 2</td>
<td>5</td>
</tr>
<tr>
<td>FRENCH 2</td>
<td>5</td>
</tr>
<tr>
<td>FRENCH 3</td>
<td>5</td>
</tr>
</tbody>
</table>

GERMAN 2 High-Beginning German .............................. 5
HMONG 2 High-Beginning Hmong .............................. 5
JAPAN 2 High-Beginning Japanese .......................... 5
PORT 2 High-Beginning Portuguese .......................... 5
SPAN 2 High-Beginning Spanish .............................. 5
SPAN 2NS Preparatory Spanish for Native Speakers ....... 5
SPAN 3 Intermediate Spanish ............................... 5
SPAN 3NS Spanish for Spanish Speakers .................... 5
SPAN 4 High-Intermediate Spanish ........................... 5
SPAN 4NS Spanish for Spanish Speakers .................... 5
SPAN 5 The Short Story: Mexico, Spain, and the U.S. ... 4
SPAN 6 The Short Story: Latin America ..................... 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 20

LIBERAL ARTS DEGREE WITH AN EMPHASIS IN SOCIAL SCIENCES – MAJOR #5176

A program designed to acquaint 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 educational institutions. Students can satisfy their general education requirements, plus focus on transferable coursework that relates to majors in liberal arts or liberal studies at CSU or UC campuses. Each student should consult with a counselor for specific information regarding intended majors at the specific college/university of choice.

ASSOCIATE OF 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 from any of the following courses (but no more than 6 units in one discipline):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRAM 1</td>
<td>3</td>
</tr>
<tr>
<td>AFRAM 3</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 31</td>
<td>3</td>
</tr>
<tr>
<td>AMIND 32</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 3</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 13</td>
<td>3</td>
</tr>
<tr>
<td>CULTURAL</td>
<td>3</td>
</tr>
<tr>
<td>HONORS</td>
<td>3</td>
</tr>
</tbody>
</table>
ASAMER 1  Indo-Chinese Americans................................. 3
ASAMER 15 Introduction to Asian-Americans................. 3
CHDEV 38 Lifespan Development.................................. 3
CHDEV/PSY 39 Child Growth and Development................. 3
CLS 11 Introduction to Chicano-Latino Studies................. 3
CLS/SOC 14 Sociology of the Mexican American Community .............................................. 3
CLS 20 Chicano Art.................................................. 3
ECON 25 Introduction to Economics......................... 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
ETHNST 10 Introduction to Ethnic Studies....................... 3
GLST 1 Introduction to Global Studies............................ 3
GLST 2 Global Issues.................................................. 3
HIST 1 Western Civilization to 1648.............................. 3
HIST 2 Western Civilization since 1648......................... 3
HIST 11 History of the United States to 1877..................... 3
HIST 12/12H History of the United States since 1877, or Honors History of the United States since 1877.................................................. 3
HIST 15 History of the British Isles.................................. 3
HIST 17 History of the Muslim World................................. 3
HIST 18 History of Ancient Greece................................. 3
HIST 21 United States Civil War...................................... 3
HIST 22 History of American Women................................. 3
HIST 29 History of Mexico, Colonial to Contemporary Period .................................................. 3
HIST 30 California History......................................... 3
HIST 34 History of the American Civil Rights Movement... 3
HS/SOC 10 Introduction to Aging Studies........................ 3
HS 20 Introduction to Social Welfare.............................. 3
POLSCI 1 Modern Politics............................................. 3
POLSCI 2 American Government...................................... 3
POLSCI 5 Comparative Government.................................. 3
POLSCI 24 International Relations.................................. 3
PSY 2/2H General Psychology, or Honors General Psychology......................... 3
PSY 5 Social Psychology............................................... 3
PSY 25 Human Sexuality............................................. 3
PSY 33 Personal and Social Adjustment.......................... 3
SOC 1A/1AH Introduction to Sociology, or Honors Introduction to Sociology......................... 3
SOC 1B Critical Thinking about Social Problems.................. 3
SOC 2 American Minority Groups................................. 3
SOC 31 The Child in Society: A Social Problems Approach............................................... 3
SOC 32 Introduction to Marriage and Family..................... 3
WSTS 10 Changing Roles of Women................................. 3
WSTS 47 Introduction to Lesbian and Gay Studies............... 3
Total 18

**LIBRARY TECHNOLOGY**

**LIBRARY TECHNOLOGY – MAJOR #5171**

Program prepares students to work as a paraprofessional in a variety of libraries.

**ASSOCIATE OF SCIENCE DEGREE AND 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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITEC 51</td>
<td>Introduction to Library Services</td>
</tr>
<tr>
<td>LITEC 52A</td>
<td>Organization of Information</td>
</tr>
<tr>
<td>LITEC 52B</td>
<td>Collection Management</td>
</tr>
<tr>
<td>LITEC 55</td>
<td>Library Public Service</td>
</tr>
<tr>
<td>LITEC 56</td>
<td>Information Technology</td>
</tr>
<tr>
<td>LITEC 57</td>
<td>Reference: Print and Online Sources</td>
</tr>
<tr>
<td>LITEC 61</td>
<td>Information and Computer Literacy</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>Units</td>
</tr>
<tr>
<td>LITEC 54</td>
<td>Literature and Services for Youth</td>
</tr>
<tr>
<td>LITEC 62</td>
<td>Medical Resources and Libraries</td>
</tr>
<tr>
<td>LITEC 63</td>
<td>Legal Resources and Libraries</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
</tr>
</tbody>
</table>

**Note:** Associate in Science degree 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. Students interested in a Certificate of Achievement are urged to consult a counselor or faculty advisor regarding this program.
MAINTENANCE MECHANIC - MAJOR #806V

This program provides training in oxyacetylene, MIG welding, machining, lathe, hydraulics, pneumatics, electrical, mechanical, use of power tools, and repair of industrial system equipment. A Certificate of Completion will be awarded for successful completion of each CTC program with a minimum "C" grade. Completion of this program will prepare students for a career in industrial machine and equipment maintenance.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. Demonstrate satisfactory knowledge of electricity fundamentals, motors, circuit types, Variable Frequency Drives, schematics, symbols, electrical test instruments and vocabulary.
2. Demonstrate satisfactory knowledge of hydraulics/pneumatics fundamentals, schematics, pumps, actuators, valves, pipes and fittings, oils and lubrication.
3. Demonstrate satisfactory knowledge of oxyacetylene and arc welding processes, common hand tools, threads and fasteners, parts and operation of engine lathes, milling machines, drill presses and precision measuring tools.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMCTC 370</td>
<td>300</td>
</tr>
<tr>
<td>MMCTC 371</td>
<td>300</td>
</tr>
<tr>
<td>MMCTC 372</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td>900</td>
</tr>
</tbody>
</table>

MAINTENANCE TECHNICIAN - FORMERLY MANUFACTURING TECHNICIAN - MAJOR #8063

This curriculum provides training in maintenance mechanic, electrical control 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</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGMCTC 351</td>
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<tr>
<td>MFGMCTC 352A</td>
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<td>MFGMCTC 352B</td>
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<td>MFGMCTC 352C</td>
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<td>MFGMCTC 352D</td>
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<tr>
<td>MFGMCTC 353A</td>
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</tr>
<tr>
<td>MFGMCTC 353B</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 353C</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 354A</td>
<td>9</td>
</tr>
<tr>
<td>MFGMCTC 354B</td>
<td>45</td>
</tr>
<tr>
<td>MFGMCTC 354C</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
</tr>
</tbody>
</table>

MANUFACTURING MECHANIC - MAJOR #8301

Manufacturing Mechanic provides an opportunity for students to prepare for employment in the manufacturing industry as an apprentice or become better prepared for the 9 month Maintenance Mechanic Program.

CERTIFICATE OF COMPLETION

Student Learning Outcomes:
1. As defined by industry standards, demonstrate knowledge of contextualized skills (i.e. trade mathematics, computer, and technical wiring fundamentals) utilized in manufacturing environment.
2. As defined by industry standards, demonstrate knowledge of hydraulics/pneumatics fundamentals, schematics, pumps, actuators, valves, pipes and fittings, oils and lubrication.
3. As defined by industry standards, demonstrate knowledge of basic metallurgy and properties of metals, oxyacetylene welding and cutting processes, and arc welding.
4. As defined by industry standards, demonstrate knowledge of electrical fundamentals, AC circuitry, and motor control.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGMCTC 351</td>
<td>9</td>
</tr>
<tr>
<td>MFGMCTC 352A</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 352B</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 352C</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 352D</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 353A</td>
<td>9</td>
</tr>
<tr>
<td>MFGMCTC 353B</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 353C</td>
<td>18</td>
</tr>
<tr>
<td>MFGMCTC 354A</td>
<td>9</td>
</tr>
<tr>
<td>MFGMCTC 354B</td>
<td>45</td>
</tr>
<tr>
<td>MFGMCTC 354C</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
</tr>
</tbody>
</table>
MARKETING

MARKETING – MAJOR #2110

This curriculum is designed for students planning to enter the marketing fields of retailing, digital marketing, advertising/promotion, and selling and sales management.

ASSOCIATE OF SCIENCE DEGREE AND 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, 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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>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>MKTG 12</td>
<td>Advertising and Promotion</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 14</td>
<td>Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 21</td>
<td>Digital Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Note: Associate degree requirements are listed on page 39.

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 team-building, conflict management, communication, and professional behavior.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 10</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 12</td>
<td>Advertising and Promotion</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 21</td>
<td>Digital Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

MARKETING, FASHION MERCHANDISING - MAJOR #2152

This degree prepares students for employment in the field of Fashion Merchandising.

ASSOCIATE OF 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 COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ART 3</td>
<td>Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40</td>
<td>Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FM 26</td>
<td>Apparel and Textiles</td>
<td>3</td>
</tr>
<tr>
<td>FM 27</td>
<td>Introduction to Fashion Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE COURSES (CHOOSE ONE)</td>
<td>Units</td>
<td></td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>DS 21</td>
<td>Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>19</strong></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 39.
3. General Education requirements for transfer certification are on page 39.

MARKETING, FASHION MERCHANDISING - CERTIFICATE OF ACHIEVEMENT

This certificate prepares students for employment in the field of Fashion Merchandising.

Student Learning Outcome:
1. Integrate the elements of fashion design into the marketing and entrepreneurial concepts of retailing, merchandising, promotion, and personal sales.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 4A</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ART 3</td>
<td>Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ECON 40</td>
<td>Introduction to Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FM 26</td>
<td>Apparel and Textiles</td>
<td>3</td>
</tr>
<tr>
<td>FM 27</td>
<td>Introduction to Fashion Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE COURSES (CHOOSE ONE)</td>
<td>Units</td>
<td></td>
</tr>
<tr>
<td>CIT 15</td>
<td>Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>DS 21</td>
<td>Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>
### 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 of 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.

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA/BT 5 Workplace Communication</td>
<td>3</td>
</tr>
<tr>
<td>BA 33 Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BA 43 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>CIT 15 Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 31 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BT 131 Applied Accounting, or ACCTG 4A Financial Accounting</td>
<td>3.5-4</td>
</tr>
<tr>
<td>MKTG 10 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 14 Retailing</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12.5-13</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 39 of the catalog, upon application, will be awarded the associate in science degree.

### 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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 33 Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 11 Selling and Sales Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

### 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.
3. Identify and describe appropriate application of the wheel of retailing to various retailing situation.
4. Identify and describe the types of retailers and appropriate distribution methods for each type of retail situation.
5. Display soft skills required for workplace success including team building, conflict management, communication, and professional behavior.

#### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 33 Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 10 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 14 Retailing</td>
<td>3</td>
</tr>
<tr>
<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 intended 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 Breadth 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<tr>
<td>MATH 6</td>
<td>Mathematical Analysis III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 7</td>
<td>Introduction to Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 17</td>
<td>Differential Equations and Linear Algebra</td>
<td>5</td>
</tr>
<tr>
<td>MATH 26</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 40</td>
<td>Programming Concepts &amp; Methodology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 11</td>
<td>Elementary Statistics, or Honors Elementary Statistics, or MATH 42</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4A</td>
<td>Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>MA 1</td>
<td>Legal and Ethical Concepts</td>
<td>2</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>MA 4</td>
<td>Office Lab Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MA 5</td>
<td>Diagnostic and Therapeutic Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MA 6A</td>
<td>Clinical Training</td>
<td>3</td>
</tr>
<tr>
<td>MA 6B</td>
<td>Advanced Training</td>
<td>3</td>
</tr>
<tr>
<td>MA 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 20-22

Note: BT 23, HLTH 2, and HS 24 are recommended electives.

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.

ASSOCIATE OF 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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN 40</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HIT 10</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MA 1</td>
<td>Legal and Ethical Concepts</td>
<td>2</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>MA 4</td>
<td>Office Lab Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MA 5</td>
<td>Diagnostic and Therapeutic Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MA 6A</td>
<td>Clinical Training</td>
<td>3</td>
</tr>
<tr>
<td>MA 6B</td>
<td>Advanced Training</td>
<td>3</td>
</tr>
<tr>
<td>MA 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 26

Note: BT 23, HLTH 2, and HS 24 are recommended electives.

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.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:

1. Identify common medical conditions and diseases.

2. Perform clinical skills commonly associated in the physician’s office.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 1</td>
<td>Legal and Ethical Concepts</td>
<td>2</td>
</tr>
<tr>
<td>MA 2</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>MA 4</td>
<td>Office Lab Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MA 5</td>
<td>Diagnostic and Therapeutic Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MA 6A</td>
<td>Clinical Training</td>
<td>3</td>
</tr>
<tr>
<td>MA 6B</td>
<td>Advanced Training</td>
<td>3</td>
</tr>
<tr>
<td>MA 19</td>
<td>Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 20

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 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. Audiate, analyze, read, and write music.

2. Perform music of at least three different time periods.

3. Perform in solo and ensemble settings.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1A</td>
<td>Music Theory I, or</td>
<td></td>
</tr>
<tr>
<td>MUS 1AE</td>
<td>Music Theory I-Extra</td>
<td>3</td>
</tr>
<tr>
<td>MUS 1B</td>
<td>Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2A</td>
<td>Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2B</td>
<td>Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUS 7A</td>
<td>Ear Training I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7B</td>
<td>Ear Training: Level II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7C</td>
<td>Ear Training: Level III</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7D</td>
<td>Ear Training: Level IV</td>
<td>1</td>
</tr>
</tbody>
</table>

Two Units of Intermediate/Advanced class requirement to be selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 22</td>
<td>Intermediate/Advanced Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUS 26</td>
<td>Intermediate/Advanced Voice</td>
<td>1</td>
</tr>
<tr>
<td>MUS 29</td>
<td>Intermediate/Advanced Guitar</td>
<td>1</td>
</tr>
<tr>
<td>MUS 42A</td>
<td>Intermediate/Advanced Brass (Brass Choir)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 42B</td>
<td>Intermediate/Advanced Woodwinds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Woodwind Choir)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 42C</td>
<td>Intermediate/Advanced Strings (String Orchestra)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 42D</td>
<td>Intermediate/Advanced Percussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Percussion Ensemble)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 81</td>
<td>Applied Music Masterclass and Lessons</td>
<td>1</td>
</tr>
</tbody>
</table>

For the Large Ensemble requirement, all music majors select four units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 30</td>
<td>College Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUS 34</td>
<td>Fresno Chorale</td>
<td>1</td>
</tr>
<tr>
<td>MUS 35</td>
<td>City Singers</td>
<td>1</td>
</tr>
<tr>
<td>MUS 39A</td>
<td>Opera Workshop</td>
<td>1</td>
</tr>
<tr>
<td>MUS 39B</td>
<td>Opera Production</td>
<td>1</td>
</tr>
<tr>
<td>MUS 40</td>
<td>Concert Band</td>
<td>1</td>
</tr>
<tr>
<td>MUS 41</td>
<td>Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS 46</td>
<td>Symphony Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUS 47A</td>
<td>Jazz Combo A</td>
<td>1</td>
</tr>
<tr>
<td>MUS 47B</td>
<td>Jazz Combo B</td>
<td>1</td>
</tr>
<tr>
<td>MUS 54</td>
<td>Latin Jazz Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>MUS 55</td>
<td>Latin Jazz Workshop</td>
<td>1</td>
</tr>
<tr>
<td>MUS 60</td>
<td>Symphonic Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUS 68</td>
<td>Symphonic Band</td>
<td>1</td>
</tr>
<tr>
<td>MUS 72</td>
<td>Jazz Composer’s Orchestra</td>
<td>2</td>
</tr>
<tr>
<td>MUS 76</td>
<td>College Philharmonic Orchestra</td>
<td>1</td>
</tr>
</tbody>
</table>

Total 22

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.

These majors must take the appropriate Applied Music class and participate in a Large Ensemble every semester they are enrolled in the Music Major.
## INSTRUMENTAL MAJORS - MAJOR #5810

### ASSOCIATE OF 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

<table>
<thead>
<tr>
<th>Music Theory:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1A Music Theory I, or MUS 1AE Music Theory I-Extra</td>
<td>3</td>
</tr>
<tr>
<td>MUS 1B Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2A Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2B Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUS 7A Ear Training: Level I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7B Ear Training: Level II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7C Ear Training: Level III</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7D Ear Training: Level IV</td>
<td>1</td>
</tr>
<tr>
<td>MUS 13 History of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 18 Basic Conducting and Score Reading</td>
<td>2</td>
</tr>
</tbody>
</table>

**Applied Music: Select Four Units**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 42A Intermediate/Advanced Brass (Brass Choir)</td>
</tr>
<tr>
<td>MUS 42B Intermediate/Advanced Woodwinds Woodwind Choir</td>
</tr>
<tr>
<td>MUS 42C Intermediate/Advanced Strings String Orchestra</td>
</tr>
<tr>
<td>MUS 42D Intermediate/Advanced Percussion Percussion Ensemble</td>
</tr>
<tr>
<td>MUS 81 Applied Music Masterclass and Lessons</td>
</tr>
</tbody>
</table>

**Ensembles: Select Eight Units**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 40 Concert Band</td>
</tr>
<tr>
<td>MUS 41 Jazz Ensemble</td>
</tr>
<tr>
<td>MUS 46 Symphony Orchestra</td>
</tr>
<tr>
<td>MUS 68 Symphonic Band</td>
</tr>
<tr>
<td>MUS 72 Jazz Composer’s Orchestra</td>
</tr>
<tr>
<td>MUS 76 College Philharmonic Orchestra</td>
</tr>
</tbody>
</table>

**Piano Proficiency:**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 20 Beginning Piano: Level I, or MUS 21 Beginning Piano: Level II, or MUS 22 Intermediate/Advanced Piano</td>
</tr>
</tbody>
</table>

### Total 35

*MUS 1A or 1AE recommended as the first course in the sequence.*

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## VOCAL MAJORS - MAJOR #5820

### ASSOCIATE OF 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

<table>
<thead>
<tr>
<th>Music Theory:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1A Music Theory I, or MUS 1AE Music Theory I-Extra</td>
<td>3</td>
</tr>
<tr>
<td>MUS 1B Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2A Music Theory III</td>
<td>3</td>
</tr>
<tr>
<td>MUS 2B Music Theory IV</td>
<td>3</td>
</tr>
<tr>
<td>MUS 7A Ear Training: Level I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7B Ear Training: Level II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7C Ear Training: Level III</td>
<td>1</td>
</tr>
<tr>
<td>MUS 7D Ear Training: Level IV</td>
<td>1</td>
</tr>
<tr>
<td>MUS 13 History of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 18 Basic Conducting and Score Reading</td>
<td>2</td>
</tr>
</tbody>
</table>

**Applied Music: Select Four Units**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 26 Intermediate/Advanced Voice</td>
</tr>
<tr>
<td>MUS 81 Applied Music Masterclass and Lessons</td>
</tr>
</tbody>
</table>

**Ensembles: Select Eight Units**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 30 College Choir</td>
</tr>
<tr>
<td>MUS 34 Fresno Chorale</td>
</tr>
<tr>
<td>MUS 35 City Singers</td>
</tr>
<tr>
<td>MUS 39A Opera Workshop</td>
</tr>
<tr>
<td>MUS 39B Opera Production</td>
</tr>
<tr>
<td>MUS 60 Symphonic Choir</td>
</tr>
<tr>
<td>MUS 92 Vocal Jazz Workshop</td>
</tr>
</tbody>
</table>

**Piano Proficiency:**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 20 Beginning Piano: Level I, or MUS 21 Beginning Piano: Level II, or MUS 22 Intermediate/Advanced Piano</td>
</tr>
</tbody>
</table>

### Total 35

*MUS 1A or 1AE recommended as the first course in the sequence.*
### GUITAR MAJORS - MAJOR #5830

**ASSOCIATE OF 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Theory:</td>
<td></td>
</tr>
<tr>
<td><em>MUS 1A</em></td>
<td>Music Theory I, or 3</td>
</tr>
<tr>
<td>MUS 1AE</td>
<td>Music Theory I-Extra</td>
</tr>
<tr>
<td>MUS 1B</td>
<td>Music Theory II 3</td>
</tr>
<tr>
<td>MUS 2A</td>
<td>Music Theory III 3</td>
</tr>
<tr>
<td>MUS 2B</td>
<td>Music Theory IV 3</td>
</tr>
<tr>
<td>MUS 7A</td>
<td>Ear Training: Level I 1</td>
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<tr>
<td>MUS 7B</td>
<td>Ear Training: Level II 1</td>
</tr>
<tr>
<td>MUS 7C</td>
<td>Ear Training: Level III 1</td>
</tr>
<tr>
<td>MUS 7D</td>
<td>Ear Training: Level IV 1</td>
</tr>
<tr>
<td>MUS 13</td>
<td>History of Music 3</td>
</tr>
<tr>
<td>MUS 18</td>
<td>Basic Conducting and Score Reading 2</td>
</tr>
</tbody>
</table>

**Applied Music: Select Four Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 29</td>
<td>Intermediate/Advanced Guitar 1-2</td>
</tr>
<tr>
<td>MUS 81</td>
<td>Applied Music Masterclass and Lessons 1</td>
</tr>
</tbody>
</table>

**Ensembles: Select Eight Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 30</td>
<td>College Choir 1-2</td>
</tr>
<tr>
<td>MUS 34</td>
<td>Fresno Chorale 1-2</td>
</tr>
<tr>
<td>MUS 39A</td>
<td>Opera Workshop 1</td>
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<tr>
<td>MUS 39B</td>
<td>Opera Production 1</td>
</tr>
<tr>
<td>MUS 40</td>
<td>Concert Band 1-2</td>
</tr>
<tr>
<td>MUS 41</td>
<td>Jazz Ensemble 1-2</td>
</tr>
<tr>
<td>MUS 46</td>
<td>Symphony Orchestra 1-2</td>
</tr>
<tr>
<td>MUS 47A</td>
<td>Jazz Combo A 1-2</td>
</tr>
<tr>
<td>MUS 47B</td>
<td>Jazz Combo B 1</td>
</tr>
<tr>
<td>MUS 54</td>
<td>Latin Jazz Ensemble 1</td>
</tr>
<tr>
<td>MUS 55</td>
<td>Latin Jazz Workshop 1</td>
</tr>
<tr>
<td>MUS 60</td>
<td>Symphonic Choir 1-2</td>
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<tr>
<td>MUS 68</td>
<td>Symphonic Band 1-2</td>
</tr>
<tr>
<td>MUS 72</td>
<td>Jazz Composer's Orchestra 1-2</td>
</tr>
<tr>
<td>MUS 76</td>
<td>College Philharmonic Orchestra 1-2</td>
</tr>
<tr>
<td>MUS 92</td>
<td>Vocal Jazz Workshop 2</td>
</tr>
</tbody>
</table>

**Piano Proficiency:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 20</td>
<td>Beginning Piano: Level I, or</td>
</tr>
<tr>
<td>MUS 21</td>
<td>Beginning Piano: Level II, or 2</td>
</tr>
<tr>
<td>MUS 22</td>
<td>Intermediate/Advanced Piano 2</td>
</tr>
</tbody>
</table>

**Total** 35

*MUS 1A or 1AE recommended as the first course in the sequence.*

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### PIANO MAJORS - MAJOR #5840

**ASSOCIATE OF 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1A</td>
<td>Music Theory I, or 2</td>
</tr>
<tr>
<td>MUS 1AE</td>
<td>Music Theory I-Extra 3</td>
</tr>
<tr>
<td>MUS 1B</td>
<td>Music Theory II 3</td>
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<tr>
<td>MUS 2A</td>
<td>Music Theory III 3</td>
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<tr>
<td>MUS 7A</td>
<td>Ear Training: Level I 1</td>
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<tr>
<td>MUS 7B</td>
<td>Ear Training: Level II 1</td>
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<tr>
<td>MUS 7C</td>
<td>Ear Training: Level III 1</td>
</tr>
<tr>
<td>MUS 7D</td>
<td>Ear Training: Level IV 1</td>
</tr>
<tr>
<td>MUS 13</td>
<td>History of Music 3</td>
</tr>
<tr>
<td>MUS 18</td>
<td>Basic Conducting and Score Reading 2</td>
</tr>
</tbody>
</table>

**Applied Music: Select Four Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 22</td>
<td>Intermediate/Advanced Piano 1-2</td>
</tr>
<tr>
<td>MUS 81</td>
<td>Applied Music Masterclass and Lessons 1</td>
</tr>
</tbody>
</table>

**Ensembles: Select Eight Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 30</td>
<td>College Choir 1-2</td>
</tr>
<tr>
<td>MUS 34</td>
<td>Fresno Chorale 1-2</td>
</tr>
<tr>
<td>MUS 39A</td>
<td>Opera Workshop 1</td>
</tr>
<tr>
<td>MUS 39B</td>
<td>Opera Production 1</td>
</tr>
<tr>
<td>MUS 40</td>
<td>Concert Band 1-2</td>
</tr>
<tr>
<td>MUS 41</td>
<td>Jazz Ensemble 1-2</td>
</tr>
<tr>
<td>MUS 46</td>
<td>Symphony Orchestra 1-2</td>
</tr>
<tr>
<td>MUS 47A</td>
<td>Jazz Combo A 1</td>
</tr>
<tr>
<td>MUS 47B</td>
<td>Jazz Combo B 1</td>
</tr>
<tr>
<td>MUS 54</td>
<td>Latin Jazz Ensemble 1</td>
</tr>
<tr>
<td>MUS 55</td>
<td>Latin Jazz Workshop 1</td>
</tr>
<tr>
<td>MUS 60</td>
<td>Symphonic Choir 1-2</td>
</tr>
<tr>
<td>MUS 68</td>
<td>Symphonic Band 1-2</td>
</tr>
<tr>
<td>MUS 72</td>
<td>Jazz Composer's Orchestra 1-2</td>
</tr>
<tr>
<td>MUS 76</td>
<td>College Philharmonic Orchestra 1-2</td>
</tr>
<tr>
<td>MUS 92</td>
<td>Vocal Jazz Workshop 2</td>
</tr>
</tbody>
</table>

**Elective: Select Two Units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MUS 9</td>
<td>Composition 2</td>
</tr>
<tr>
<td>MUS 10A</td>
<td>Beginning Jazz Improvisation 2</td>
</tr>
<tr>
<td>MUS 24</td>
<td>Beginning Voice: Level I 2</td>
</tr>
<tr>
<td>MUS 25</td>
<td>Beginning Voice: Level II 2</td>
</tr>
<tr>
<td>MUS 27</td>
<td>Beginning Guitar: Level I 2</td>
</tr>
<tr>
<td>MUS 28</td>
<td>Beginning Guitar: Level II 2</td>
</tr>
<tr>
<td>MUS 112</td>
<td>Introduction to Finale 2</td>
</tr>
<tr>
<td>MUS 150</td>
<td>Music Teaching I 2</td>
</tr>
</tbody>
</table>

**Total** 35
### 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**

<table>
<thead>
<tr>
<th>Music Theory:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 3</td>
</tr>
<tr>
<td>MUS 1A</td>
</tr>
<tr>
<td>MUS 1AE</td>
</tr>
<tr>
<td>MUS 3P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Appreciation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 12</td>
</tr>
<tr>
<td>MUS 13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applied Music: Select Two Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 42A</td>
</tr>
<tr>
<td>MUS 80A</td>
</tr>
<tr>
<td>MUS 80B</td>
</tr>
<tr>
<td>MUS 80C</td>
</tr>
<tr>
<td>MUS 80D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ensembles: Select Four Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 40</td>
</tr>
<tr>
<td>MUS 46</td>
</tr>
<tr>
<td>MUS 68</td>
</tr>
<tr>
<td>MUS 76</td>
</tr>
</tbody>
</table>

**Total 12**

### 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**

<table>
<thead>
<tr>
<th>Music Theory:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 3</td>
</tr>
<tr>
<td>MUS 1A</td>
</tr>
<tr>
<td>MUS 1AE</td>
</tr>
<tr>
<td>MUS 3P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Appreciation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 12</td>
</tr>
<tr>
<td>MUS 13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applied Music: Select Two Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 29</td>
</tr>
<tr>
<td>MUS 80A</td>
</tr>
<tr>
<td>MUS 80B</td>
</tr>
<tr>
<td>MUS 80C</td>
</tr>
<tr>
<td>MUS 80D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ensembles: Select Four Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 30</td>
</tr>
<tr>
<td>MUS 34</td>
</tr>
<tr>
<td>MUS 35</td>
</tr>
<tr>
<td>MUS 39A</td>
</tr>
</tbody>
</table>

**Total 12**

### JAZZ PERFORMANCE – MAJOR #5812

This program satisfies the music course requirements for the certificate in Jazz Performance which provides the fundamental skills necessary for the jazz performer.

**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.
4. Perform improvisations at an intermediate to advanced level.
REQUIRED CORE COURSES

Jazz Improvisation:
MUS 10A Beginning Jazz Improvisation, or 2
MUS 10B Intermediate/Advanced Jazz Improvisation 2

Jazz History:
MUS 16 Jazz History and Appreciation 3

Theory and Composition: Select Three Units
MUS 1A Music Theory I 3
MUS 1AE Music Theory I-Extra 3
MUS 3 Music Fundamentals 3
MUS 3P Music Fundamentals Plus 3
MUS 4 Jazz Theory 3
MUS 6 Jazz Arranging and Composition 3

Ensembles: Select Four Units
MUS 41 Jazz Ensemble 1
MUS 47A Jazz Combo A 1
MUS 47B Jazz Combo B 1
MUS 54 Latin Jazz Ensemble 1
MUS 55 Latin Jazz Workshop 1
MUS 72 Jazz Composer's Orchestra 1-2
MUS 92 Vocal Jazz Workshop 2

Total 12

MUSIC THEORY – MAJOR #5860

The Music Theory Certificate Program ensures completion of the under-graduate 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

*MUS 1A or 1AE recommended as the first course in the sequence.

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

Music Theory:
MUS 1A Music Theory, or 3
MUS 1AE Music Theory I-Extra 3

Music Appreciation:
MUS 12 Music Appreciation, or 3
MUS 13 History of Music 3

Applied Music - Select Two Units
MUS 42D Intermediate/Advanced Brass (Percussion Ensemble) 1-2
MUS 80A Applied Music Masterclass A 1
MUS 80B Applied Music Masterclass B 1
MUS 80C Applied Music Masterclass C 1
MUS 80D Applied Music Masterclass D 1
MUS 81 Applied Music Masterclass and Lessons 1

Ensembles: Select Four Units
MUS 40 Concert Band 1-2
MUS 46 Symphony Orchestra 1-2
MUS 68 Symphonic Band 1-2
MUS 76 College Philharmonic Orchestra 1-2

Total 12

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

*MUS 1A or 1AE recommended as the first course in the sequence.
### REQUIRED CORE COURSES

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### STRING PERFORMANCE – MAJOR #5814

The String Performance Certificate Program ensures that the string 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

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<th>Units</th>
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Total 12
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

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<th>Music Theory:</th>
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<td>MUS 1AEMusic Theory I-Extra, or</td>
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Music Appreciation:

| MUS 12Music Appreciation, or      |       |
| MUS 13History of Music.............| 3     |

Applied Music: Select Two Units

| Units |
|----------------------|--------|
| MUS 4BIntermediate/Advanced Brass | 1-2 |
| MUS 80AApplied Music Masterclass A | 1     |
| MUS 80BApplied Music Masterclass B | 1     |
| MUS 80CApplied Music Masterclass C | 1     |
| MUS 80DDApplied Music Masterclass D | 1     |
| MUS 81Applied Music Masterclass and Lessons | 1     |

Ensembles: Select Four Units

| Units |
|------------------------|--------|
| MUS 17Concert Band...... | 2     |
| MUS 46Symphony Orchestra| 2     |
| MUS 68Symphonic Band....| 2     |
| MUS 76College Philharmonic Orchestra | 2     |

Total 12

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.

ASSOCIATE OF 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

<table>
<thead>
<tr>
<th>Music Theory:</th>
<th>Units</th>
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<tr>
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Commercial Music:

| MUS 5Computer Music Production............................| 3     |
| MUS 8Audio Engineering.......................................| 3     |
| MUS 11Music Business.........................................| 3     |
| MUS 112Introduction to Finale................................| 2     |

Musical Proficiency:

| MUS 7AEar Training: Level I...................................| 1     |
| **MUS 20Beginning Piano: Level I.............................| 2     |
| ***MUS 21Beginning Piano: Level II.........................| 2     |
| *MUS 24Beginning Voice: Level I................................| 2     |

Music History:

| MUS 17History of Rock.........................................| 3     |

Ensembles: Select Four Units

| Units |
|----------------------|--------|
| MUS 30College Choir... | 1-2    |
| MUS 34Fresno Chorale.. | 1-2    |
| MUS 35City Singers.... | 1-2    |
| MUS 39AOpera Workshop  | 1     |
| MUS 39BOpera Production | 1     |
| MUS 40Concert Band.... | 1-2    |
| MUS 46Symphony Orchestra | 1-2   |
| MUS 47AJazz Combo A.... | 1     |
| MUS 47BJazz Combo B.... | 1     |
| MUS 54Latin Jazz Ensemble | 1     |
| MUS 55Latin Jazz Workshop | 1     |
| MUS 60Symphonic Choir | 1-2    |
| MUS 68Symphonic Band... | 1-2   |
| MUS 72Jazz Composer's Orchestra | 1-2 |
| MUS 76College Philharmonic Orchestra.....................| 1-2   |
| MUS 92Vocal Jazz Workshop.................................| 2     |

Electives: Two to Three 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 3Music Fundamentals | 3     |
| MUS 4Jazz Theory...... | 3     |
| MUS 5BMusic for Film, Television, and Video Games......| 3 |
| MUS 6Jazz Arranging and Composition......................| 3     |
| MUS 7BEar Training: Level II...............................| 1     |
| MUS 8BAudio Engineering II.................................| 3     |
| MUS 9Composition............................................| 2     |
| MUS 10ABeginning Jazz Improvisation......................| 2     |
| MUS 10BIntermediate/Advanced Jazz Improvisation........| 2     |
| MUS 12Music Appreciation..................................| 3     |

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2. Perform early intermediate level piano solos, duets and ensembles in an artistic manner using good technique with stylistic and aesthetic considerations.

1. Analyze, read, and write music.

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

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<td>Basic Conducting and Score Reading</td>
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<tr>
<td>MUS 76</td>
<td>Intermediate Guitar</td>
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</tr>
<tr>
<td>MUS 77</td>
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<td>MUS 78</td>
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<td>MUS 80</td>
<td>Beginning Voice: Level II</td>
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<tr>
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<td>Beginning Voice: Level I</td>
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<td>MUS 92</td>
<td>Beginning Voice: Level II</td>
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<td>MUS 93</td>
<td>Beginning Guitar: Level I</td>
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<td>Beginning Guitar: Level II</td>
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<td>Intermediate Guitar</td>
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<td>Beginning Voice: Level I</td>
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<td>MUS 104</td>
<td>Beginning Voice: Level II</td>
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<td>Beginning Guitar: Level I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 106</td>
<td>Beginning Guitar: Level II</td>
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<tr>
<td>MUS 109</td>
<td>Advanced Woodwinds</td>
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<td>MUS 111</td>
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<td>3</td>
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<tr>
<td>MUS 112</td>
<td>Intermediate Guitar</td>
<td>3</td>
</tr>
<tr>
<td>MUS 113</td>
<td>Beginning Piano: Level I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 114</td>
<td>Beginning Piano: Level II</td>
<td>3</td>
</tr>
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<td>MUS 115</td>
<td>Beginning Voice: Level I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 116</td>
<td>Beginning Voice: Level II</td>
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<td>MUS 117</td>
<td>Beginning Guitar: Level I</td>
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</tr>
<tr>
<td>MUS 118</td>
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<td>3</td>
</tr>
</tbody>
</table>

Total 30-31

Notes: *MUS 5 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.

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 115</td>
<td>Music Business</td>
<td>3</td>
</tr>
<tr>
<td>MUS 3</td>
<td>Music Fundamentals, or</td>
<td></td>
</tr>
<tr>
<td>MUS 1A</td>
<td>Music Theory I, or</td>
<td></td>
</tr>
<tr>
<td>MUS 1AE</td>
<td>Music Theory I-Extra, or</td>
<td></td>
</tr>
<tr>
<td>MUS 3P</td>
<td>Music Fundamentals Plus</td>
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Piano Proficiency:

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<tr>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MUS 20</td>
<td>Beginning Piano Level I, or</td>
<td></td>
</tr>
<tr>
<td>MUS 21</td>
<td>Beginning Piano Level II, or</td>
<td></td>
</tr>
<tr>
<td>MUS 22</td>
<td>Intermediate/Advanced Piano</td>
<td>2</td>
</tr>
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Electives: Select Two to Three Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 5B</td>
<td>Music for Film, Television, and Video Games</td>
<td>3</td>
</tr>
<tr>
<td>MUS 88</td>
<td>Audio Engineering II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 93</td>
<td>Songwriting</td>
<td>3</td>
</tr>
<tr>
<td>MUS 112</td>
<td>Introduction to Finale</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 16-17

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, Foundations of 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 OF 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.
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

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN 31</td>
<td>Foundations and Introduction to Medical-Surgical Nursing .................................................</td>
</tr>
<tr>
<td>RN 32</td>
<td>Foundations and Introduction to Medical-Surgical Nursing Clinical ..................................</td>
</tr>
<tr>
<td>RN 32A</td>
<td>Foundations and Introduction to Medical-Surgical Nursing Skills ................................</td>
</tr>
<tr>
<td>RN 33</td>
<td>Transcultural Health Care .................................................</td>
</tr>
<tr>
<td>RN 35A</td>
<td>Pharmacology: Introduction to Pharmacology ...............................................................</td>
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</table>
### Associate Degree and Certificate Programs

**Nursing, Registered**

#### 2022-2023 Fresno City College Catalog

### Associate Degree and Certificate Programs

#### Nursing, Registered

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Units</th>
<th>Third Semester</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>RN 35B Pharmacology B: Nursing Pharmacological Applications</td>
<td>2</td>
<td>RN 51 Nursing Care of the Adult with Complex Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>RN 41 Nursing Care of the Adult with Common Health Problems</td>
<td>2.5</td>
<td>RN 52 Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical</td>
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</tr>
<tr>
<td>RN 42 Nursing Care of the Adult with Common Health Problems Clinical</td>
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<td>RN 52A Nursing Care of the Adult and Older Adult with Complex Health Problems Skills</td>
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<td>RN 42A Nursing Care of the Adult with Common Health Problems Skills</td>
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<td>RN 53 Nursing Care of the Older Adult</td>
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<tr>
<td>RN 45 Nursing Care of the Childbearing Family Theory</td>
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<td>Total</td>
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<td>RN 46 Nursing Care of the Childbearing Family Clinical</td>
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<td><strong>Fourth Semester</strong></td>
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#### Second Year

**First Semester**

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<th>Units</th>
<th>Third Semester</th>
<th>Units</th>
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<tr>
<td>RN 51 Nursing Care of the Adult with Complex Health Problems</td>
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<td>RN 61 Nursing Care of the Critically Ill Adult and Coordinator of Care</td>
</tr>
<tr>
<td>RN 52 Nursing Care of the Adult and Older Adult with Complex Health Problems Clinical</td>
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<td>RN 62 Nursing Care of the Critically Ill Adult and Coordinator of Care Clinical</td>
</tr>
<tr>
<td>RN 52A Nursing Care of the Adult and Older Adult with Complex Health Problems Skills</td>
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<td>RN 62A Nursing Care of the Critically Ill Adult Skills</td>
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<tr>
<td>RN 53 Nursing Care of the Older Adult</td>
<td>1</td>
<td>RN 65 Nursing Care of the Client with Behavioral and Emotional Disorders</td>
</tr>
<tr>
<td>RN 55 Nursing Care of Infants &amp; Children</td>
<td>2</td>
<td>RN 66 Nursing Care of the Client with Behavioral and Emotional Disorders Clinical</td>
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**Second Semester**

<table>
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<tr>
<th>Units</th>
<th>Third Semester</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>RN 61 Nursing Care of the Critically Ill Adult and Coordinator of Care</td>
<td>2.5</td>
<td>RN 101 Transition to Fresno City College Registered Nursing Program</td>
</tr>
<tr>
<td>RN 62 Nursing Care of the Critically Ill Adult and Coordinator of Care Clinical</td>
<td>3</td>
<td>RN 102 Transition to Fresno City College Registered Nursing Program Skills</td>
</tr>
<tr>
<td>RN 62A Nursing Care of the Critically Ill Adult Skills</td>
<td>0.5</td>
<td><strong>ELECTIVE COURSES</strong></td>
</tr>
<tr>
<td>RN 65 Nursing Care of the Client with Behavioral and Emotional Disorders</td>
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<td>RN 19 Work Experience (Cooperative), Occupational</td>
</tr>
<tr>
<td>RN 66 Nursing Care of the Client with Behavioral and Emotional Disorders Clinical</td>
<td>1.5</td>
<td>RN 105 Medication Math</td>
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<tr>
<td></td>
<td></td>
<td>RN 107 Introduction to Nursing Process</td>
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**Total** 41.5

#### LVN TO RN UPGRADE

**Prior to Entering Third Semester Fresno City College Nursing Curriculum**

<table>
<thead>
<tr>
<th>Units</th>
<th>Third Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1.5</td>
<td>RN 101 Transition to Fresno City College Registered Nursing Program</td>
</tr>
<tr>
<td>RN 102 Transition to Fresno City College Registered Nursing Program Skills</td>
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<td>RN 102 Transition to Fresno City College Registered Nursing Program Skills</td>
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**Total** 2.5

<table>
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<td>1.5</td>
<td>RN 101 Transition to Fresno City College Registered Nursing Program</td>
</tr>
<tr>
<td>RN 102 Transition to Fresno City College Registered Nursing Program Skills</td>
<td>1</td>
<td>RN 102 Transition to Fresno City College Registered Nursing Program Skills</td>
</tr>
</tbody>
</table>

**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 OF 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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 20</td>
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<tr>
<td>BT 28</td>
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<tr>
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<td>PLEGAL 14</td>
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<tr>
<td>PLEGAL 19</td>
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ELECTIVES

Choose any 2 of the following courses for a total of 6 units:

<table>
<thead>
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<th>Course</th>
<th>Units</th>
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<tr>
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<td>PLEGAL 17</td>
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<td>PLEGAL 18</td>
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<tr>
<td>PLEGAL 20</td>
<td>3</td>
</tr>
<tr>
<td>PLEGAL 156/BT 140</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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 1A/1AH</td>
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</tr>
<tr>
<td>PHIL 1B/1BH</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1</td>
<td>3</td>
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<tr>
<td>HIST 2</td>
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<tr>
<td>HUMAN 10</td>
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</tr>
<tr>
<td>HUMAN 11</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1B</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2/H</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3A</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3B</td>
<td>3</td>
</tr>
</tbody>
</table>

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 OF SCIENCE DEGREE

Student Learning Outcomes:
1. Produce professional quality photographs in various contemporary formats.

FIRST YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 6</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 12</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 15</td>
<td>3</td>
</tr>
</tbody>
</table>

SECOND YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 23</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 32</td>
<td>3</td>
</tr>
</tbody>
</table>

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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 6</td>
</tr>
<tr>
<td>PHOTO 12</td>
</tr>
<tr>
<td>PHOTO 23</td>
</tr>
<tr>
<td>PHOTO 26</td>
</tr>
<tr>
<td>PHOTO 32</td>
</tr>
<tr>
<td>PHOTO 57</td>
</tr>
</tbody>
</table>

DIGITAL PHOTOGRAPHY – MAJOR #5223

Students taking these courses will learn the various methods and processes of digital photography emphasizing quality on all levels. From digital capture to high end output printing, students will learn control of a variety of digital systems.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Organize effective color management of images from input to output on high end digital printing devices.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 6</td>
</tr>
<tr>
<td>PHOTO 12</td>
</tr>
<tr>
<td>PHOTO 23</td>
</tr>
<tr>
<td>PHOTO 52</td>
</tr>
<tr>
<td>PHOTO 57</td>
</tr>
</tbody>
</table>

Note: Associated degree requirements are listed on page 39.
FINE ART PHOTOGRAPHY – MAJOR #5224

Students taking these courses will concentrate on the fine art of photography using various methods and processes with historical techniques as well as new forms. Both film and digital technologies are used to develop the creative process and personal expression.

CERTIFICATE OF ACHIEVEMENT

Student Learning Outcomes:
1. Utilize photography as a visual communication tool.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 6</td>
<td>Digital Imaging Fundamentals</td>
</tr>
<tr>
<td>PHOTO 12</td>
<td>Beginning Photoshop</td>
</tr>
<tr>
<td>PHOTO 15</td>
<td>Photography and Visual Literacy</td>
</tr>
<tr>
<td>PHOTO 18</td>
<td>Advanced Black and White Photography</td>
</tr>
<tr>
<td>PHOTO 23</td>
<td>Advanced Photoshop</td>
</tr>
<tr>
<td>PHOTO 57</td>
<td>Applied Color and Alternative Photographic Media</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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 52</td>
<td>Introduction to Entrepreneurship</td>
</tr>
<tr>
<td>PHOTO 6</td>
<td>Digital Imaging Fundamentals</td>
</tr>
<tr>
<td>PHOTO 49</td>
<td>Multimedia Photojournalism</td>
</tr>
<tr>
<td>PHOTO 52</td>
<td>Adobe Lightroom</td>
</tr>
</tbody>
</table>

Total 12

SOCIAL MEDIA IMAGING – MAJOR #5226

Course work for the non-photographer in image creation and publishing in the Internet environment. Concepts of image making, copyright, branding, and visual engagement specifically for online usage.

CERTIFICATE

Student Learning Outcome:
1. Produce correctly formatted still images and video media in a creative manner for social media publishing.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 5</td>
<td>Introduction to Photography</td>
</tr>
<tr>
<td>PHOTO 14</td>
<td>Photography for Social Media</td>
</tr>
<tr>
<td>PHOTO 52</td>
<td>Adobe Lightroom</td>
</tr>
</tbody>
</table>

Total 9

SPECIAL EVENT PHOTOGRAPHY – MAJOR #5227

Special Event Photography covers the many varied types of events that require professional photographic services. The Photographic entrepreneur needs to develop the skills necessary to be successful in contemporary business as it is the most common entry for new media creators.

CERTIFICATE OF COMPLETION

Student Learning Outcome:
1. Produce event specific visual content and create a business contract for the event deliverables.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 351</td>
<td>Business Planning and New Venture Launch</td>
</tr>
<tr>
<td>PHOTO 320</td>
<td>Special Event Photography</td>
</tr>
</tbody>
</table>

Total 99

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>
<tr>
<td>MATH 6A</td>
<td>4</td>
</tr>
<tr>
<td>MATH 6B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 6C</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4A</td>
<td>4</td>
</tr>
</tbody>
</table>

### 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.

### 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLSCI 2/2H</td>
<td>3</td>
</tr>
<tr>
<td>American Government, or Honors American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

### LIST A

Select three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH/PSY 42</td>
<td>4</td>
</tr>
<tr>
<td>Statistics for the Behavioral Sciences, or</td>
<td></td>
</tr>
<tr>
<td>MATH 11</td>
<td>4</td>
</tr>
<tr>
<td>Elementary Statistics</td>
<td></td>
</tr>
<tr>
<td>POLSCI 1</td>
<td>3</td>
</tr>
<tr>
<td>Modern Politics</td>
<td></td>
</tr>
<tr>
<td>POLSCI 3</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Political Theory and Thought</td>
<td></td>
</tr>
<tr>
<td>POLSCI 5</td>
<td>3</td>
</tr>
<tr>
<td>Comparative Government</td>
<td></td>
</tr>
<tr>
<td>POLSCI 24</td>
<td>3</td>
</tr>
<tr>
<td>International Relations</td>
<td></td>
</tr>
</tbody>
</table>

### LIST B

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 20</td>
<td>3</td>
</tr>
<tr>
<td>Law and the Legal System</td>
<td></td>
</tr>
<tr>
<td>ECON 40</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Microeconomics, or</td>
<td></td>
</tr>
<tr>
<td>ECON 50</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Macroeconomics</td>
<td></td>
</tr>
</tbody>
</table>

### 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 OF 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 apply 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</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology, or Honors General Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 36</td>
<td>3</td>
</tr>
<tr>
<td>Biological Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 42</td>
<td>4</td>
</tr>
<tr>
<td>Statistics for the Behavior Sciences</td>
<td></td>
</tr>
</tbody>
</table>
ELECTIVES
DEPTH: Choose two (2) of the following:
- PSY 5 Social Psychology...................... 3
- PSY 12 Child Abuse......................... 3
- PSY 16 Abnormal Psychology.............. 3
- PSY 18 The Psychology of Criminal Behavior........ 3

LIFESPAN: Choose one (1) of the following:
- PSY 25 Human Sexuality..................... 3
- PSY 33 Personal & Social Adjustment........ 3
- PSY 38 Lifespan Development............... 3
- PSY 39 Child Growth and Development..... 3

DIVERSITY: Choose one (1) of the following:
- AFRAM 1 Introduction to African American Studies........ 3
- AMIND 31 American Indian Culture.......... 3
- ANTHRO 2 Cultural Anthropology........... 3
- ASAMER 15 Introduction to Asian-Americans.... 3
- CLS 11 Introduction to Chicano-Latino Studies... 3
- ETHNST 10 Introduction to Ethnic Studies..... 3
- SOC 2 American Minority Groups........... 3
- WSTS 10 Changing Roles of Women........... 3

Total 22

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
- PSY 2/2H General Psychology, or Honors General Psychology............... 3
- PSY 36 Biological Psychology.................. 3
- PSY/MATH 42 Statistics for the Behavioral Sciences, or MATH 11/11H Elementary Statistics, or Honors Elementary Statistics............... 4
- PSY 45 Introduction to Research Methods in Psychology.......................... 3
- Select one of the following courses: Units
  - BIOL 5 Human Biology.............................. 4
  - PSY 5 Social Psychology....................... 3
- 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

Total 19-20

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.

RADIOLOGIC 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.
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 OF SCIENCE DEGREE

Student Learning Outcome:
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)

First Year - First Semester
- RAD 1A Fundamentals of Radiology Technology ......... 6
- RAD 1B Basic Radiographic Positioning Laboratory.... 1
- RAD 1C Clinical Orientation Laboratory .................. 3
- RAD 1D Nursing Procedures in Radiologic Technology .................................................. 3

First Year - Second Semester
- RAD 2A Radiation Biology ..................................... 6
- RAD 2B Advanced Radiographic Positioning Laboratory .................................................. 1
- RAD 2C Clinical Observation Laboratory .................. 3
- RAD 2D Quality Assurance in Radiologic Technology ...... 1

First Year - Summer Semester
- RAD 3 Basic Clinical Radiologic Technology .......... 8

Second Year - First Semester
- RAD 4A Pathology in Radiologic Technology .......... 2
- RAD 4B Advanced Clinical Radiologic Technology.... 12
- RAD 4C Advanced Radiologic Positioning Laboratory-Cranium ..................................... 1

Second Year - Second Semester
- RAD 5A Special Procedures in Radiologic Technology ..... 2
- RAD 5B Specialized Clinical Radiologic Technology .... 12
- RAD 5C Fluoroscopy ............................................. 2

Second Year - Summer Semester
- RAD 6 Concentrated Clinical Radiologic Technology ...... 4

Total 67
RECREATION LEADERSHIP – MAJOR #4300

Recreation Leadership is an Associate in Arts degree program and contributes to the health and well-being of individuals and enhances the quality of community life. Our courses encourage students to learn and participate in hands-on activities to help all people live healthy, enjoyable, active, and meaningful lifestyles. Recreation Leadership majors are active in the classroom and the community. The profession focuses on the principles underlying recreational activities and the practices involved in providing the general public's indoor and outdoor recreational facilities and services. These recreational activities and services occur in outdoor recreation, parks and recreation, recreational therapy programs for people with disabilities, special events, sports and entertainment facilities, travel and tourism, and senior and youth-serving organizations. This field of study helps us to understand social behavior and environmental sciences, helping people grow and develop in their leisure pursuits while conserving our natural resources.

ASSOCIATE OF ARTS DEGREE

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.

REQUIRED CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 1 Contemporary Health Issues</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 2 First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>REC 19 Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>REC 20 Introduction to Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 21 Recreation Leadership</td>
<td>3</td>
</tr>
<tr>
<td>REC 23 Outdoor Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Four (4) PE Physical Education Activity Classes

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 4 Badminton</td>
<td>1</td>
</tr>
<tr>
<td>PE 6 Fitness and Health</td>
<td>1</td>
</tr>
<tr>
<td>PE 7 Golf</td>
<td>1</td>
</tr>
<tr>
<td>PE 8 Basic Self Defense</td>
<td>1</td>
</tr>
<tr>
<td>PE 12 Swimming</td>
<td>1</td>
</tr>
<tr>
<td>PE 12B Intermediate Swimming</td>
<td>1</td>
</tr>
<tr>
<td>PE 13 Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 13B Intermediate Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 14 Volleyball</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 17B Intermediate Yoga</td>
<td>1</td>
</tr>
<tr>
<td>PE 27 High-Intensity Cardio Interval Training</td>
<td>1</td>
</tr>
<tr>
<td>PE 45 Performance Training and Conditioning Techniques for Intercollegiate Athletics</td>
<td>0.5-1</td>
</tr>
<tr>
<td>PE 71 Soccer</td>
<td>1</td>
</tr>
<tr>
<td>PE 72 Spinning for Fitness</td>
<td>1</td>
</tr>
</tbody>
</table>

Total  22

RECREATION LEADERSHIP – MAJOR #4300

This Certificate of Achievement is designed to prepare students for employment opportunities in recreation and leisure as well as preparation for transfer to a four year university.

CERTIFICATE OF ACHIEVEMENT

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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 2 First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>REC 19 Work Experience (Cooperative), Occupational</td>
<td>3</td>
</tr>
<tr>
<td>REC 20 Introduction to Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 21 Recreation Leadership</td>
<td>3</td>
</tr>
<tr>
<td>REC 23 Outdoor Recreation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total  15

RESPRATORY CARE PRACTITIONER – MAJOR #4610

The Respiratory Care Practitioner (RCP) is a health care specialist involved in managing, diagnostically 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 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).

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCARE 15</td>
<td>Introduction to Respiratory Care Profession</td>
</tr>
<tr>
<td>RCARE 16</td>
<td>Patient Assessment</td>
</tr>
<tr>
<td>RCARE 16B</td>
<td>Diagnostic Methods</td>
</tr>
<tr>
<td>RCARE 16C</td>
<td>Clinical Applications I</td>
</tr>
<tr>
<td>RCARE 17</td>
<td>Respiratory Care Pharmacology</td>
</tr>
<tr>
<td>RCARE 18</td>
<td>Physiology of the Respiratory System</td>
</tr>
<tr>
<td>RCARE 20</td>
<td>Introduction to Respiratory Care Modalities</td>
</tr>
<tr>
<td>RCARE 21</td>
<td>Applications and Procedures in Respiratory Care</td>
</tr>
<tr>
<td>RCARE 21C</td>
<td>Clinical Applications II</td>
</tr>
<tr>
<td>RCARE 26</td>
<td>Airway Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND YEAR</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCARE 21B</td>
<td>Clinical Applications III</td>
</tr>
<tr>
<td>RCARE 22</td>
<td>Introduction to Mechanical Ventilation</td>
</tr>
<tr>
<td>RCARE 23B</td>
<td>Clinical Applications IV</td>
</tr>
<tr>
<td>RCARE 24</td>
<td>Neonatal Diseases</td>
</tr>
<tr>
<td>RCARE 24B</td>
<td>Pediatric Diseases</td>
</tr>
<tr>
<td>RCARE 25</td>
<td>Obstructive Respiratory Diseases</td>
</tr>
<tr>
<td>RCARE 25B</td>
<td>Restrictive Disorders and Trauma</td>
</tr>
<tr>
<td>RCARE 27</td>
<td>Respiratory Care Review and Simulations</td>
</tr>
</tbody>
</table>

**Total 47.5**

**Recommended Sequence**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCARE 15</td>
<td>Introduction to Respiratory Care Profession</td>
</tr>
<tr>
<td>RCARE 16</td>
<td>Patient Assessment</td>
</tr>
<tr>
<td>RCARE 16C</td>
<td>Clinical Applications I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCARE 17</td>
<td>Respiratory Care Pharmacology</td>
</tr>
<tr>
<td>RCARE 20</td>
<td>Introduction to Respiratory Care Modalities</td>
</tr>
</tbody>
</table>

**Total 47.5**

**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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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/Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ASL 20</td>
<td>Introduction to Interpreting</td>
<td>3</td>
</tr>
<tr>
<td>ASL 21</td>
<td>American Sign Language to English Translation</td>
<td>3</td>
</tr>
<tr>
<td>ASL 22</td>
<td>English to American Sign Language Translation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

SOCIOLERGY 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</th>
<th>Title</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</td>
<td></td>
</tr>
<tr>
<td>MATH 11</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>
<tr>
<td></td>
<td><strong>Choose one of the following 3-unit courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ANTHRO 2/2H</td>
<td>Cultural Anthropology, or Honors Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ETHNST 10</td>
<td>Introduction to Ethnic Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 20</td>
<td>Introduction to Social Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2</td>
<td>American Minority Groups</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/HS 10</td>
<td>Introduction to Aging Studies</td>
<td>3</td>
</tr>
<tr>
<td>SOC/CLS 14</td>
<td>Sociology of the Mexican American Community</td>
<td>3</td>
</tr>
<tr>
<td>WSTS 10</td>
<td>Changing Roles of Women</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

Notes: Required Major Courses ........................................ 19 units.
CSU General Education or IGETC ................................... 39 units.
Transferable Elective as needed to reach 60 transferable units.
Degree Total .................................................. 60 units.

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.
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 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.

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

- SPAN 1 Beginning Spanish ............................................... 5
- SPAN 2 High-Beginning Spanish ...................................... 5
- SPAN 3 Intermediate Spanish, or SPAN 3NS Intermediate Spanish for Spanish Speakers ..... 5
- SPAN 4 High-Intermediate Spanish, or SPAN 4NS High-Intermediate Spanish for Spanish Speakers .............................................. 5

Group A: Select a minimum of four (4) additional units from the following list

- SPAN 5 The Short Story: Mexico, Spain, and the U.S.................. 4
- SPAN 6 The Short Story: Latin American................................. 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

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 OF 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

- TA 23 Technical Theatre Practicum................................. 3
- TA 25 Stagecraft, or TA 35 Costume Craft, or
- TA 36 Costume Design .............................................. 3
- TA 30 Theatre Appreciation, or TA 15C Creative Writing: Playwriting, or
- TA 38 Script Analysis .............................................. 3
- TA 31 Theatre History and Literature I, or TA 32 Theatre History and Literature II ............. 3
- TA 41 Beginning Acting, or TA 42 Beginning Acting for Theatre Majors .......... 3
- TA 43 Intermediate Acting .............................................. 3
- TA 46 Voice for the Actor.............................................. 3

Three Units from the Following Courses:

- TA 28 Introduction to Stage Makeup .............................. 3
- TA 40 Performance Practicum ........................................ 3
- TA 44A Actors Workshop .................................................. 3
- TA 48A Teasers I ............................................................ 0.5
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 I</td>
</tr>
<tr>
<td>TA 40</td>
<td>Performance Practicum, or</td>
</tr>
<tr>
<td>TA 23</td>
<td>Technical Theatre Practicum</td>
</tr>
<tr>
<td>TA 41</td>
<td>Beginning Acting, or</td>
</tr>
<tr>
<td>TA 42</td>
<td>Beginning Acting for Theatre Majors</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</td>
</tr>
<tr>
<td>TA 27B</td>
<td>Introduction to Lighting Design</td>
</tr>
<tr>
<td>TA 28</td>
<td>Introduction to Stage Makeup</td>
</tr>
<tr>
<td>TA 36</td>
<td>Costume Design</td>
</tr>
<tr>
<td>TA 38</td>
<td>Script Analysis</td>
</tr>
<tr>
<td>TA 40</td>
<td>Performance Practicum</td>
</tr>
<tr>
<td>TA 43</td>
<td>Intermediate Acting</td>
</tr>
</tbody>
</table>

Note: TA 40 can be taken in this section only if they were not taken as part of the core.

Notes: Required Major Courses 18 units.
CSU General Education or IGETC 39 units.
Transferable Elective as needed to reach 60 transferable units.
Degree Total 60 units.

DESIGN/TECHNICAL THEATRE STUDIES – MAJOR #5482

The Design/Technical Theatre Studies major 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 four-year university or conservatory.

ASSOCIATE OF ARTS DEGREE

Student Learning Outcomes:
1. Analyze a play in the context of its historical period, structure, theme, character, style and synthesize these components with research in the creation of a theatrical design.
2. Demonstrate the performance process as an actor from rehearsal to preparing to performance.
3. Demonstrate the production from construction/installation through technical rehearsals and performance before an audience.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 23</td>
<td>Technical Theatre Practicum</td>
</tr>
<tr>
<td>TA 25</td>
<td>Stagecraft</td>
</tr>
<tr>
<td>TA 30</td>
<td>Theatre Appreciation, or</td>
</tr>
<tr>
<td>TA 31</td>
<td>Theatre History and Literature I, or</td>
</tr>
<tr>
<td>TA 38</td>
<td>Script Analysis</td>
</tr>
<tr>
<td>TA 35</td>
<td>Costume Crafts</td>
</tr>
<tr>
<td>TA 41</td>
<td>Beginning Acting, or</td>
</tr>
<tr>
<td>TA 42</td>
<td>Beginning Acting for Theatre Majors</td>
</tr>
</tbody>
</table>

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 27A</td>
<td>Introduction to Scenic Design</td>
</tr>
<tr>
<td>TA 27B</td>
<td>Introduction to Lighting Design</td>
</tr>
<tr>
<td>TA 28</td>
<td>Introduction to Stage Makeup</td>
</tr>
<tr>
<td>TA 36</td>
<td>Costume Design</td>
</tr>
</tbody>
</table>

Select six units from the following list:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA 15C</td>
<td>Creative Writing: Playwriting</td>
</tr>
<tr>
<td>TA 27A</td>
<td>Introduction to Scenic Design</td>
</tr>
<tr>
<td>TA 27B</td>
<td>Introduction to Lighting Design</td>
</tr>
<tr>
<td>TA 28</td>
<td>Introduction to Stage Makeup</td>
</tr>
<tr>
<td>TA 29A</td>
<td>Advanced Technical Theatre Practicum</td>
</tr>
<tr>
<td>TA 29B</td>
<td>Advanced Technical Theatre Practicum II</td>
</tr>
<tr>
<td>TA 31</td>
<td>Theatre History and Dramatic Literature I</td>
</tr>
<tr>
<td>TA 32</td>
<td>Theatre History and Dramatic Literature II</td>
</tr>
<tr>
<td>TA 36</td>
<td>Costume Design</td>
</tr>
<tr>
<td>TA 38</td>
<td>Script Analysis</td>
</tr>
<tr>
<td>TA 39A</td>
<td>Intermediate Crew Practicum I</td>
</tr>
</tbody>
</table>
**WELDING TECHNOLOGY**

**AUTOMATED WELDING SYSTEMS - MAJOR #8377**

Introduction into the setup, programming, troubleshooting and operation of welding automation using six axis welding robots.

**CERTIFICATE OF ACHIEVEMENT**

**Student Learning Outcomes:**

1. Safely operate common robotic welding automation systems while performing advanced programming and welding functions.
2. Analyze the theory and skills necessary for performing advanced programming and operational tasks.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 3A</td>
<td>Welding Design and Fabrication</td>
<td>5</td>
</tr>
<tr>
<td>WELD 3B</td>
<td>Intermediate Welding Design and Fabrication</td>
<td>5</td>
</tr>
<tr>
<td>WELD 5A</td>
<td>Automated Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 5B</td>
<td>Advanced Automated Welding and Cutting</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 16

**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 OF 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.

**REQUIRED CORE 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 21</td>
<td>Occupational Safety and Health</td>
<td>2</td>
</tr>
<tr>
<td>AT 40</td>
<td>Preparing for Employment Opportunities</td>
<td>3</td>
</tr>
<tr>
<td>AT 130</td>
<td>Industrial Mathematics</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>
</tr>
<tr>
<td>WELD 2A</td>
<td>Introduction to Welding Technology, or</td>
<td></td>
</tr>
<tr>
<td>WELD 2B</td>
<td>Advanced Multi-Process Welding, or</td>
<td></td>
</tr>
<tr>
<td>WELD 6A</td>
<td>Shielded Metal Arc Welding Theory and Application, or</td>
<td></td>
</tr>
<tr>
<td>WELD 6B</td>
<td>Semi-Automatic Wire Feed Welding, and</td>
<td></td>
</tr>
<tr>
<td>WELD 6C</td>
<td>Gas Tungsten Arc Welding Theory and Application</td>
<td>10.5-11</td>
</tr>
<tr>
<td>WELD 3A</td>
<td>Welding Design and Fabrication</td>
<td>5</td>
</tr>
<tr>
<td>WELD 3B</td>
<td>Intermediate Welding Design and Fabrication</td>
<td>5</td>
</tr>
</tbody>
</table>

**ELECTIVES (Select 1 course)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>AT 140</td>
<td>Introduction to Machine Shop</td>
</tr>
<tr>
<td>CADD 24</td>
<td>2D CAD II</td>
</tr>
<tr>
<td>CAM 10</td>
<td>CNC Mill Programming &amp; Operation I</td>
</tr>
<tr>
<td>ENGR 10</td>
<td>Introduction to Engineering</td>
</tr>
<tr>
<td>ENGR 11</td>
<td>Manufacturing Processes</td>
</tr>
<tr>
<td>WELD 56</td>
<td>Blueprint Reading for Welders</td>
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</table>

**Total** 39.5-42

**FIRST YEAR**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
<td>Technical Computer Applications</td>
</tr>
<tr>
<td>AT 130</td>
<td>Industrial Mathematics</td>
</tr>
<tr>
<td>WELD 6A</td>
<td>Shielded Metal Arc Welding Theory and Application</td>
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</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>AT 21</td>
<td>Occupational Safety and Health</td>
</tr>
<tr>
<td>AT 40</td>
<td>Preparing for Employment Opportunities</td>
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<tr>
<td>CADD 16</td>
<td>3D Solid Modeling I</td>
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<tr>
<td>WELD 2B</td>
<td>Advanced Multi-Process Welding, or</td>
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<tr>
<td>WELD 6B</td>
<td>Semi-Automatic Wire Feed Welding</td>
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**SECOND YEAR**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>DRAFT 12</td>
<td>Drafting Practices</td>
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<tr>
<td>WELD 3A</td>
<td>Welding Design and Fabrication</td>
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<tr>
<td>WELD 6C</td>
<td>Gas Tungsten Arc Welding Theory and Application</td>
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**Second Semester**

<table>
<thead>
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<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>WELD 3B</td>
<td>Intermediate Welding Design and Fabrication</td>
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</table>

**Electives**

2-4

**Note:** Associate degree requirements are listed on page 39.
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 ACHIEVMENT

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

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<th>Course</th>
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<tbody>
<tr>
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<tr>
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</tr>
<tr>
<td>AT 40</td>
<td>3</td>
</tr>
<tr>
<td>AT 130</td>
<td>3</td>
</tr>
<tr>
<td>CADD 16</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2A</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2B</td>
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<td>WELD 6A</td>
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<td>WELD 6B</td>
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<td>WELD 6C</td>
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<tr>
<td>CADD 24</td>
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<tr>
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<td>ENGR 10</td>
<td>2</td>
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<tr>
<td>ENGR 11</td>
<td>3</td>
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<tr>
<td>WELD 56</td>
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Total: 39.5-42

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>AT 21</td>
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<td>CADD 16</td>
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<tr>
<td>WELD 2B</td>
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</tr>
<tr>
<td>WELD 6B</td>
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</table>

SECOND YEAR

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAFT 12</td>
<td>3</td>
</tr>
<tr>
<td>WELD 3A</td>
<td>3</td>
</tr>
<tr>
<td>WELD 6C</td>
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Second Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>WELD 3B</td>
<td>5</td>
</tr>
<tr>
<td>Electives</td>
<td>2-4</td>
</tr>
</tbody>
</table>

PIE AND STRUCTURAL STEEL CERTIFICATION

– FORMERLY PIPE AND STRUCTURAL STEEL CERTIFICATION OPTION - MAJOR #8375

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 OF 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.
### Welding Technology

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10 Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AT 21 Occupational Safety and Health</td>
<td>2</td>
</tr>
<tr>
<td>AT 40 Preparing for Employment Opportunities</td>
<td>3</td>
</tr>
<tr>
<td>AT 130 Industrial Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12 Drafting Practices</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2A Introduction to Welding Technology, or</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 2B Advanced Multi-Process Welding, or</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6A Shielded Metal Arc Welding Theory and Application</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6B Semi-Automatic Wire Feed Welding, and</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6C Gas Tungsten Arc Welding Theory and Application</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 4A Heavy Plate, Structural Steel and Welding Certification</td>
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**ELECTIVES (Select 2 courses)**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CADD 14 2D CAD I</td>
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<td>CADD 24 2D CAD II</td>
<td>3</td>
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<td>ENGR 11 Manufacturing Processes</td>
<td>3</td>
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<tr>
<td>WELD 56 Blueprint Reading for Welders</td>
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**Total Units:** 38.5-41

### FIRST YEAR

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AT 10 Technical Computer Applications</td>
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<tr>
<td>AT 130 Industrial Mathematics</td>
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<tr>
<td>DRAFT 12 Drafting Practices</td>
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</tr>
<tr>
<td>WELD 2A Introduction to Welding Technology, or</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6A Shielded Metal Arc Welding Theory and Application</td>
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**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AT 21 Occupational Safety and Health</td>
<td>2</td>
</tr>
<tr>
<td>AT 40 Preparing for Employment Opportunities</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2B Advanced Multi-Process Welding, or</td>
<td>3.5-6</td>
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<td>WELD 6B Semi-Automatic Wire Feed Welding</td>
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### SECOND YEAR

**First Semester**

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<th>Course</th>
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<tbody>
<tr>
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<td>WELD 6C Gas Tungsten Arc Welding Theory and Application</td>
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**Recommended Elective**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>WELD 4B Pipe, Tube Welding and Certification</td>
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**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WELD 4B Pipe, Tube Welding and Certification</td>
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</tbody>
</table>

**Recommended Elective**

### PIPE AND STRUCTURAL STEEL CERTIFICATION

**– FORMERLY PIPE AND STRUCTURAL STEEL CERTIFICATION OPTION – MAJOR #8375**

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, building, 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.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10 Technical Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AT 21 Occupational Safety and Health</td>
<td>2</td>
</tr>
<tr>
<td>AT 40 Preparing for Employment Opportunities</td>
<td>3</td>
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<tr>
<td>AT 130 Industrial Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12 Drafting Practices</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2B Advanced Multi-Process Welding, or</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6A Shielded Metal Arc Welding Theory and Application, or</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6B Semi-Automatic Wire Feed Welding, and</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6C Gas Tungsten Arc Welding Theory and Application, or</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 4A Heavy Plate, Structural Steel and Welding Certification</td>
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**ELECTIVES (Select 2 courses)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CADD 14 2D CAD I</td>
<td>3</td>
</tr>
<tr>
<td>CADD 24 2D CAD II</td>
<td>3</td>
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<tr>
<td>ENGR 10 Introduction to Engineering</td>
<td>2</td>
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<tr>
<td>ENGR 11 Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>WELD 56 Blueprint Reading for Welders</td>
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**Total Units:** 38.5-41
WELDING TECHNOLOGY

FIRST YEAR

First Semester

<table>
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<tbody>
<tr>
<td>AT 10</td>
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<tr>
<td>AT 130</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2A</td>
<td>3.5-6</td>
</tr>
<tr>
<td>WELD 6A</td>
<td>3.5-6</td>
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Second Semester

<table>
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<th>Units</th>
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<tbody>
<tr>
<td>AT 21</td>
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<tr>
<td>AT 40</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2B</td>
<td>3.5-5</td>
</tr>
<tr>
<td>WELD 6B</td>
<td>3.5-5</td>
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SECOND YEAR

First Semester

<table>
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<tr>
<th>Course</th>
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<tr>
<td>WELD 4A (Heavy Plate, Structural Steel and Welding Certification)</td>
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<td>WELD 6C (Gas Tungsten Arc Welding Theory and Application)</td>
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Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>WELD 4B (Pipe, Tube Welding and Certification)</td>
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<tr>
<td>Recommended Elective</td>
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WELDING COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WELD 3A</td>
<td>3</td>
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<tr>
<td>WELD 3B</td>
<td>3</td>
</tr>
<tr>
<td>WELD 4A</td>
<td>3</td>
</tr>
<tr>
<td>WELD 4B</td>
<td>3</td>
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</tbody>
</table>

Total 14.5

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

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 10</td>
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<tr>
<td>CADD 16</td>
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</table>

Second Semester

<table>
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<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WELD 3A</td>
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SECOND YEAR

First Semester

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>WELD 3B (Intermediate Welding Design and Fabrication)</td>
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Total 16

REQUIRED COURSES

<table>
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<tr>
<th>Course</th>
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<td>BA 51 Business Planning and New Venture Launch</td>
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<tr>
<td>BA 52 Introduction to Entrepreneurship</td>
<td>3</td>
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</table>

2022-2023 Fresno City College Catalog
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. 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.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 130 Industrial Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 12 Drafting Practices</td>
<td>3</td>
</tr>
<tr>
<td>WELD 2A Introduction to Welding Technology, and Advanced Multi-Process Welding, or Shielded Metal Arc Welding Theory and Application</td>
<td>3-6</td>
</tr>
<tr>
<td>WELD 6A Shielded Metal Arc Welding Theory and Application</td>
<td>10.5-11</td>
</tr>
<tr>
<td>WELD 6B Semi-Automatic Wire Feed Welding, and Gas Tungsten Arc Welding Theory and Application</td>
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Total 16.5-17

WOMEN’S AND GENDER STUDIES – FORMERLY WOMEN’S STUDIES – MAJOR #7611

The Women’s and Gender Studies program is 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 others, and their concern for survival in a violent-prone society. Attentiveness to diversity, privilege and power, and women's unique creative contributions to human experience are central aspects of this program. Because Women’s and Gender Studies is interdisciplinary, it also provides an academic background helpful to those planning careers in law, business, education and medicine.

ASSOCIATE OF 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WSTS 10 Changing Roles of Women</td>
<td>3</td>
</tr>
<tr>
<td>WSTS/HS 25 Assertiveness Training</td>
<td>2</td>
</tr>
<tr>
<td>WSTS/CLS 24 La Chicana and Latina</td>
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<tr>
<td>WSTS/HIST 22 History of American Women</td>
<td>3</td>
</tr>
<tr>
<td>WSTS/ENGL 36 Women’s Literature</td>
<td>3</td>
</tr>
<tr>
<td>WSTS/AFRAM 41 African-American Women’s Studies</td>
<td>3</td>
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<tr>
<td>WSTS/FN 43 Women’s Nutrition</td>
<td>2</td>
</tr>
<tr>
<td>WSTS/AFRAM 43 Introduction to Lesbian and Gay Studies</td>
<td>3</td>
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</table>

Total 20

Note: Associate degree requirements are listed on page 39.
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 222 Internal Affairs Investigator
Admin of Justice 224 Interview and Interrogation
Admin of Justice 225 Standardized Field Sobriety Tests (SFSTs)
Admin of Justice 226 Advanced Roadside Impaired Driving Enforcement (ARIDE)
Admin of Justice 233A Tactical Firearms
Admin of Justice 233B Firearms – Tactical Rifle
Admin of Justice 233C Civil Procedures for Law Enf Officers
Admin of Justice 233D Wilderness Tracking
Admin of Justice 233E Electronic Weapons Update
Admin of Justice 233F Driving (PSP) Update
Admin of Justice 233G Court & PSP Update
Admin of Justice 233H Advanced Officer Course Update
Admin of Justice 233I Arrest & Control Update
Admin of Justice 233J Training Conference
Admin of Justice 233K Patrol Canine Handler Update
Admin of Justice 233L Introduction to Tactical Dispatcher Course
Admin of Justice 233M
Admin of Justice 233N
Admin of Justice 233O
Admin of Justice 233P
Admin of Justice 233Q
Admin of Justice 233R
Admin of Justice 233S
Admin of Justice 233T
Admin of Justice 233U
Admin of Justice 233V
Admin of Justice 233W
Admin of Justice 233X
Admin of Justice 233Y
Admin of Justice 233Z
Admin of Justice 234
Admin of Justice 234A
Admin of Justice 235
Admin of Justice 235A
Admin of Justice 235B
Admin of Justice 235C
Admin of Justice 235D
Admin of Justice 235E
Admin of Justice 235F
Admin of Justice 235G
Admin of Justice 235H
Admin of Justice 235I
Admin of Justice 235J
Admin of Justice 235K
Admin of Justice 235L
Admin of Justice 235M
Admin of Justice 235N
Admin of Justice 235O
Admin of Justice 235P
Admin of Justice 235Q
Admin of Justice 235R
Admin of Justice 235S

Response to Active Shooters Update
Training Conference - Gang Update
Training Conference – Active Shooter Update
Training Conference – Emotional Survival for Officers Update
Officer Skills Orientation Update
Pursuit Intervention Technique – PIT Update
Critical Incident Stress Debrief Update
De-escalation Update
Regular Basic Course Module 1
Adult Corrections Officer Core Course
Adult Corrections Officer Core Enhancement Course
PC 832 Laws of Arrest
PC 832 Firearms
Reserve Officer – Firearm Update Training
Reserve Officer – Vehicle Transition Update Training
Reserve Officer Driver Awareness Issues – Below 100 Update
Reserve Officer – E.V.O.C. Update Training
Reserve Officer – C.P.R /A.E.D. Update Training
Reserve Officer – First Aid Update Training
Reserve Officer – Electronic & Impact Weapons Update Training
Reserve Officer – Report Writing Update Training
Arrest and Control Update
Tactical Rifle for Law Enforcement
Firearms Update
Driver Training – Emergency Vehicle Update
Bias Based Policing Update Training
Principled Policing Update
First Aid for Medical Injuries Update
CPR/AED Update Training
First Aid for Traumatic Injuries Update
Arrest & Control Techniques Update
Baton User Update
Canine Agitator
Detective School
Driver Awareness Instructor
Driver Awareness Update
Driver Training Instructor
PIT Instructor
Driver Training/EVOC/PIT Update
Driver Training Simulator
Driving/Force Option Simulators Combo
Drug Facilitated Sexual Assault
Electronic Weapons
Firearms Instructor Update
Arrest & Control Techniques Update
Tactical Rifle Advanced
Tactical Rifle Update
Tactical Rifle 1st Responder
Tactical Shotgun
Admin of Justice 245T  Tactical Handgun Advanced  
Admin of Justice 245U  First Aid & CPR Refresher  
Admin of Justice 245V  Force Option Simulator  
Admin of Justice 245W  Less Lethal Weapons  
Admin of Justice 245X  Mental Illness Awareness Refresher  
Admin of Justice 245Y  Officer Safety/Field Tactics  
Admin of Justice 245Z  Officer Safety/Field Tactics Update  
Admin of Justice 246  Rifle Marksmanship and Sniper  
Admin of Justice 246A  Search/Arrest Warrant  
Admin of Justice 246B  Traffic Collision Investigation Update  
Admin of Justice 246C  Use of Force Update  
Admin of Justice 246D  Perishable Skills Program I  
Admin of Justice 246E  Perishable Skills Program II  
Admin of Justice 246F  Rifle Instructor  
Admin of Justice 246G  K9 Handler Update  
Admin of Justice 246H  MACTAC – Multi Assault, Counter  
Admin of Justice 246I  Terrorism Action Capabilities  
Admin of Justice 246J  Basic Bicycle Patrol  
Admin of Justice 246K  Sobriety Tests Update  
Admin of Justice 246L  Crisis Intervention Training  
Admin of Justice 246M  Critical Incident Articulation Update  
Admin of Justice 262  SB 29 Mental Health Awareness for FTOs  
Admin of Justice 270A  Basic Police Academy—Part 1  
Admin of Justice 270B  Basic Police Academy—Part 2  
Admin of Justice 271A  PC 832 Laws of Arrest/Arrest & Control  
Admin of Justice 271B  PC 832 Firearms  
Admin of Justice 272  Reg Basic Course—Mod Format—Mod III  
Admin of Justice 273  Reg Basic Course—Mod Format—Mod II  
Admin of Justice 274  Reg Basic Course—Mod Format—Mod I  
Admin of Justice 276  POST Basic Supervisor Course  
Admin of Justice 276A  STC Basic Supervisor Course  
Admin of Justice 276B  Supervisor Enhancement Course  
Admin of Justice 277  Public Safety Dispatcher  
Admin of Justice 284  Communications Training Officer  
Admin of Justice 285  Probation Core Course  
Admin of Justice 286  Juvenile Correctional Officer Core  
Admin of Justice 290  Firearms Instructor Course  
Admin of Justice 291  Field Training Officer  
Admin of Justice 291A  FTO Update  
Admin of Justice 291B  Police Field Training Techniques Update  
Admin of Justice 293  Drug Influence—H & S 11550  
Admin of Justice 295  Traffic Collision Investigation  
Auto Tech 281A  Automatic Power Trains I  
Auto Tech 281B  Automatic Power Trains II  
Auto Tech 282A  Suspen/Wheel Align  
Auto Tech 282B  Auto Braking Systems  
Auto Tech 283A  Engine Performance and Diagnosis  
Auto Tech 283B  Electrical Systems  
Auto Tech 284  Auto Air Conditioning  
Auto Tech 285  Auto Engines  
Auto Tech 292  ASE Cert Preparatory  
Auto Tech 294  Lamp/Brk Adj Prep  
Biology 222  Biology Skills  
Computer Info Tech 202  Introduction to Online Learning  
Counseling 247A  College Study Skills, General Habits  
Counseling 247B  College Study Skills, Academic Skills  
Counseling 249  Job Preparation  
Decision Science 221  Support for Finite Mathematics  
Decision Science 223  Support for Business Statistics  
Dental Hygiene 200  Clinical Dental Hygiene IV  
Developmental Services 250  Career Awareness  
Developmental Services 252A  Communication Skills and Strategies 1  
Developmental Services 252B  Communication Skills and Strategies 2  
Developmental Services 260  Job Search, Employment Portfolio, and Interview Development  
Developmental Services 262  Group Interaction  
Developmental Services 264  Trans to College Stud w/Disabilities  
Developmental Services 279  Consumer Skills  
Developmental Services 282  Independent Living Skills for Students in DSP&S  
Developmental Services 282C  Horticulture Skills I  
Developmental Services 282D  Horticulture Skills II  
Developmental Services 284  Beginning Computer Literacy  
Developmental Services 286  Basic Word Processing for Work  
Developmental Services 286C  Basic Modified Computer Applications  
Developmental Services 286D  Greenhouse Workforce Prep  
Developmental Services 286E  Reading Comprehension 1  
Developmental Services 286F  Reading Comprehension 2  
Developmental Services 286G  Paragraphs to Essays  
Developmental Services 286H  Essay Development and College Writing  
Developmental Services 286I  Strategies for Academic Success  
Developmental Services 292  Learning Skills and Strategies  
Developmental Services 292A  Intermediate Listening and Speaking  
Developmental Services 292B  Pronunciation Improvement and Accent Reduction  
Developmental Services 292C  Intermediate Academic Reading and Writing  
Developmental Services 292D  High-Intermediate Academic Reading and Writing  
Developmental Services 292E  Accelerated Reading and Composition Skills  
Developmental Services 292F  Writing Improvement  
Developmental Services 292G  Fire Apparatus Driver Operator 1A  
Developmental Services 292H  Fire Apparatus Driver Operator 1B  
Developmental Services 292I  Fire Apparatus Driver/Operator — Aerial Apparatus  
Developmental Services 292J  Fire Apparatus Driver/Operator — Water Tender  
Developmental Services 292K  Fire Apparatus Driver/Operator — Wildland Fire Apparatus  
Developmental Services 292L  Advanced Firefighter Continuing Education  
Developmental Services 292M  Chief Fire Officer 3A  
Developmental Services 292N  Chief Fire Officer 3B  
Developmental Services 292O  Chief Fire Officer 3C  
Developmental Services 292P  Chief Fire Officer 3D  
Developmental Services 292Q  EMT 1 Refresher  
Developmental Services 292R  I-300, Intermediate ICS  
Developmental Services 292S  Elementary Algebra  
Developmental Services 292T  Support for College Algebra
Math 211S Support for Statistics
Nursing, Registered
Nursing, Registered 201 NCLEX–RN Review
Nursing, Registered 202 Successful Strategies for RN Students
Nursing, Registered 204 Intro to the Nursing Profession
Nursing, Registered 205 Care of the Childbearing and Parenting
Nursing, Registered 206 Care of the Childbearing and Parenting
Nursing, Registered 207 Perioperative Nursing
Special Studies 277 Credit, Nondegree SP ST
Theatre Arts 200 Movement for the Production The Little Prince

B. Noncredit
Applied Tech 340 Introduction to Machine Shop
Applied Tech 350 Pneumatic & Hydraulic Systems
Automotive Technology 373 Mechanical Power Drive Systems
Automotive Technology 374 Fork Lift Safety and Operation
Automotive Technology 375 State Laws and Federal Regulations
Automotive Technology 376 Safe Operation Fundamentals
Automotive Technology 377 Operations of Commercial Vehicles I
Automotive Technology 378 Operations of Commercial Vehicles II
Business Administration 310 Introduction to Business
Business Administration 333 Human Relations in the Workplace
Business Administration 351 Business Planning and New Venture Launch
Business & Technology 306 Computer Keyboarding
Business & Technology 307 Introduction to Word Processing
Business & Technology 315 21st Century Workforce Skills
Business & Technology 332 Customer Service in the One-Person Office
Business & Technology 370A Office Asst Applications
Business & Technology 370B Office Asst Applications
Business & Technology 375A Introduction to Keyboarding
Business & Technology 375B Introduction to Filing
Business & Technology 375C Basic Office Communications
Business & Technology 375D Math Review and Ten-Key Calculator
Business & Technology 375E Job Search Documents
Business & Technology 377 Getting Started with Computers and Workplace Technology
Business & Technology 379 Intro to Microsoft Office Applications
Counseling 350 College Transition and Success
Counseling 351 Learning Assessment
Developmental Services 359 Low-Intermediate Academic Grammar
EMLS 365G Low-Intermediate Listening and Speaking
EMLS 365LS Low-Intermediate Pronunciation Improvement and Accent Reduction
EMLS 365P Intermediate Listening and Speaking
EMLS 366LS Pronunciation Improvement and Accent Reduction
EMLS 366P Intermediate Academic Reading and Writing
EMLS 367G High-Intermediate Academic Grammar
EMLS 367LS High-Intermediate Listening and Speaking
EMLS 367P High-Intermediate Pronunciation Improvement and Accent Reduction
EMLS 367RW High Intermediate Academic Reading and Writing
EMLS 368G Advanced Academic Grammar
EMLS 368LS Advanced Listening and Speaking
EMLS 368P Advanced Pronunciation Improvement and Accent Reduction
English 300 Academic Learning & Literacy Skills
English 326A Academic Reading Efficiency
Graphic Communications 300A Adobe ACA Certification
Graphic Communications 315 Web Design
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 re
Graphic Communications 327 Digital Video Production
Graphic Communications 330 Adobe InDesign/Professional Publishing
Graphic Communications 331 Intermediate Photoshop
Graphic Communications 332 Cinematography
Graphic Communications 334 Introduction to 3-D Animation
Graphic Communications 335 Video Post Production
Graphic Communications 339A Introduction to Graphic Design
Graphic Communications 340A Intermediate Graphic Design
Graphic Communications 341 Visual Communications
Graphic Communications 347 Introduction to Media Appreciation
Graphic Communications 351 Storyboarding
Graphic Communications 353 Adobe After Effects
Graphic Communications 353 Heat, Vent, & Air Conditioning 351 RETA/CARO Ready – EPA Section 608 Technician Certification
Graphic Communications 354 RETA/CARO Ready – Industrial Refrigeration High School Equivalency Preparation
Graphic Communications 354 Intro to Microsoft Office Applications
Music 322 Senior Piano Skills
Music 326 Senior Vocal Skills
Music 327 Senior Guitar Skills
Music 335 Senior City Singers
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 354 Senior Latin Jazz Skills
Music 357 Senior Community Orchestra
Music 375 Special Event Photography
Music 375 Tutoring
Music 375 ST 300 Zero Unit, No Grade SP ST
Music 375 Special Studies 377 Senior Musical Performance Skills
Music 375 Theatre Arts 346 Senior Musical Theatre Skills
Music 375 Theatre Arts 347 Senior Play Production
Music 375 Theatre Arts 348 English for Construction
Music 375 Vocational ESL 380
Career & Technology Center Courses
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  Machine Shop and Equipment Repair for
Maint Mechanic 371  Maintenance Mechanics
Maint Mechanic 372  Maintenance Mechanics
Maint Mechanic 372  Electrical Fundamentals for Maintenance Mechanics
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, Reedley College, Madera Community College 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
2 units, 2.25 lecture 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 public safety background investigators. Materials fee will be charged.

219 REQUALIFICATION—BASIC COURSE
6 units, 5.29 lecture hours, 3.11 lab hours, (Pass/No Pass), (Formerly Administration of Justice 119)
PREREQUISITE: Administration of Justice 270B. A POST Regular Basic Academy Certificate or equivalent or, for out-of-state, a letter of recommendation from POST. No criminal record that disqualifies 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.

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.
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.

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. Must possess a California POST SFST certificate issued by a POST certified presenter. 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 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, 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.
levels are:

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.

233F WILDERNESS TRACKING

0.3 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. 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 UPDATE  
0.1 unit, 6.2 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 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) UPDATE  
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),  
(Open Entry/Open Exit)  
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.
ADVANCED OFFICER COURSE UPDATE

233J ADVANCED OFFICER COURSE 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 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. 5-hour course, updated instruction on officer mindset, perimeters, yearly updates for electronic weapons and California OSHA blood borne pathogens.

ARREST & CONTROL UPDATE

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 reten-
tions; 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.

TRAINING CONFERENCE

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.

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.

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.

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 veteran 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.
233T TRAINING CONFERENCE – ACTIVE SHOOTER 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.

Techniques and tactics for law enforcement officers to engage active shooters in various situations in order to reduce injuries or deaths in active shooting incidents.

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.

233V OFFICER SKILLS ORIENTATION 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 case law, policies, firearms, chemical weapons, and less-than-lethal weapons, common to officers entering the patrol environment.

233W PURSUIT INTERVENTION TECHNIQUE – PIT UPDATE
0.1 unit, 0.06 lecture hour, 0.24 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.

Train officers in legal guidelines, recognize when to use PIT technique, and properly initiate the PIT maneuver using a properly equipped law enforcement vehicle to immobilize a suspect vehicle.

233X CRITICAL INCIDENT STRESS DEBRIEF UPDATE
0.3 unit, 0.92 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, understand, practice the importance of incident assessment, strategic intervention planning, related to the practice of Critical Incident Stress Management (CISM) in law enforcement.

233Y DE-ESCALATION 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.

Refresh and updated legislation related to California’s Necessary Force laws and De-Escalation Strategies related to use of force. Provide officers with ability to utilize verbal tactical approaches to high stress incidents encountered in law enforcement.
233Z REGULAR BASIC COURSE MODULE I
7 units, 22.23 lab hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 273. Current (within the 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 Drivers License.
Satisfies training requirements mandatory for every full-time peace officer under Penal Code section 830.6(a)(1) and 832.6(a)(1). Completion of all three modules satisfies the Regular Basic Course training requirement.

234 ADULT CORRECTIONS OFFICER CORE COURSE
6 units, 4.5 lecture hours, 5.77 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.
Review and update case law, policies, firearms, chemical weapons, and less-than-lethal weapons, common to officers entering the patrol environment.

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, 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 officers.

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 and/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. 
Arrest and control techniques update required by POST for current law enforcement officers who fall within the POST mandated perishable skills requirements.

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. Students 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 tactic 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. Students 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. Students must have the legal authority to possess the required law enforcement weaponry involved in this course. Students 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 policing approaches to law enforcement officers that emphasize 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.

245A ARREST & CONTROL TECHNIQUES UPDATE
0.1 unit, 0.06 lecture hours, 0.23 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 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 reten-
tions; 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 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.

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), (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 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 police canine use; 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), (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.

- Possession of a valid California Driver’s License; knowledge of, and familiarity with, case law pertinent to law enforcement emergency driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge 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 regulation to train law enforcement driving courses, EVOC, high and low speed driving.

245G DRIVER TRAINING INSTRUCTOR
0.5 unit, 42 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 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, case law pertinent to law enforcement emergency driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge 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.

- Possession of a valid California Driver’s License; knowledge of, and familiarity with, case law pertinent to law enforcement emergency driving; knowledge of, and experience driving a law enforcement emergency vehicle; Knowledge 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.

- 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.
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, and experience driving a law enforcement emergency vehicle; knowledge of, and familiarity with, case law pertinent to law enforcement emergency driving; 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 interior patrol vehicle restrictions/limitations while driving such vehicles; knowledge and familiarity with proper radio use and procedures during stressful event in policing; knowledge of and familiarity with interior patrol vehicle restrictions/limitations while driving such vehicles; 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 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), (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 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), (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.

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; 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.

- Handgun training, marksmanship, loading drills, shooting on the move, multiple targets, threat assessment, barricades, team shooting, shooting from vehicles.

245P TACTICAL RIFLE ADVANCED
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. 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.

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.
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 and safe handling and use of nonlethal weapons; knowledge of, and familiarity with, California Penal codes 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.

Tactical use of the patrol shotgun, safety, effectiveness, shooting positions, loading/unloading, carry positions, shooting on the move, transitioning drills, multiple targets and shotgun manipulation.

245T TACTICAL HANDGUN ADVANCED
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, 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, 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 appointee. 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 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 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 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 familiarly 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 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 familiarly 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 familiarly 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 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.
levels are: advanced student training that builds upon them. These minimum skill levels are:

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 5 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 role advanced course, ballistics, zeroing, ammunition, responsibilities, maintenance, moving targets, use of force decision making and shooting drills.

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

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, driving skills, CPR & First
Aid, blood borne pathogens, tactical communication, body cameras,
case law, marksmanship, handgun, shotgun, and arrest & control.
246F RIFLE INSTRUCTOR
0.5 unit, 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, 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. 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 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.
Train students in instructing the use of rifles by law enforcement officers using adult learning concepts, weapon systems, range safety, legal aspects, target diagnosis, use of drills, tactical movements and weapons maintenance.

246G K9 HANDLER UPDATE
0.1-0.4 unit, 8.4-25.2 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 or advanced student training that builds upon them. These minimum skill levels are:
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 agility 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
0.5 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, 0.47 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.
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)

246L CRITICAL INCIDENT ARTICULATION UPDATE
0.3 unit, 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.
Provide public safety officers with a comprehensive understanding of case law and statutory law as it relates to use of force incidents. The students will be exposed to scenario based, force on force, training with outcomes ranging anywhere from verbal de-escalation to the application of lethal force. The students will have and understanding of the roles of all entities involved in the critical incident investigation process.

246M CITIZEN POLICE ACADEMY
1 unit, 3 lab hours, (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: None.
To educate and inform citizens regarding the function and duties of law enforcement personnel.

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.

270A BASIC POLICE ACADEMY – PART 1
19.5 units, 13.38 lecture hours, 12.83 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
17.5 units, 12.2 lecture hours, 17 lab hours
PREREQUISITE: Administration of Justice 270A. 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 (PC 13511.5), 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, 1.77 lecture hours, 0.55 lab hours, (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
7 units, 6.45 lecture hours, 1.9 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
8 units, 6.7 lecture hours, 4.45 lab hours
PREREQUISITE: Administration of Justice 272. 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 III 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
21.5 units, 14 lecture hours, 11 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 Comprehensive 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, 4.67 lecture hours, (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, administrative 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.

276B SUPERVISOR ENHANCEMENT COURSE
1 unit, 1.4 lecture hours, (Pass/No Pass),
(Open Entry/Open Exit)
PREREQUISITE: Administration of Justice 276.
Develops current first line supervisors skills related to supervision, tactical situations, employee development, community involvement, accountability, expectations of themselves, and self-growth as a supervisor.

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, administrative 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.

284 COMMUNICATIONS TRAINING OFFICER
2 units, 42 lecture hours, (1 week),
(Pass/No Pass)
PREREQUISITE: Administration of Justice 278. 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 that 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 criminal 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
12 units, 33.9 lecture hours, 8.1 lab hours,
(6 weeks), (Pass/No Pass), (Open Entry/ Open Exit), (Formerly Administration of Justice 85)
PREREQUISITE: None.
Knowledge and skills essential for newly hired Probation Officers. Meets certification requirements for California Standards and Training for Corrections. Materials fee will be charged.
286 JUVENILE CORRECTIONAL OFFICER CORE
8.5 units, 25.44 lecture hours, 16.56 lab hours, (5 weeks), (Pass/No Pass), (Open Entry/Open Exit), (Formerly Administration of Justice 86)
PREREQUISITE: None.
Knowledge and skills essential for newly hired Juvenile Correctional Officers 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, 21 lecture hours, 21 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.

Satisfies POST 1070 regulations for POST Firearms Instructor, 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: 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, 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. Satisfies POST 1070 regulations to become a Field Training Officer. Materials fee will be charged.
291A FTO UPDATE
1 unit, 25.2 lecture hours, (1 week), (Pass/No Pass)
PREREQUISITE: Administration of Justice 291. 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.

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.

291B POLICE FIELD TRAINING TECHNIQUES UPDATE
0.4 unit, 0.47 lecture 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.

295 TRAFFIC COLLISION INVESTIGATION
2 units, 42 lecture hours, (1 week), (Pass/No Pass), (Formerly Administration of Justice 81 and 95)
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.

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.

AEROSPACE STUDIES (AEROST)

1A AS100 HERITAGE AND VALUES
1 unit, 1 lecture hour
COREQUISITE: Aerospace Studies 3A.
This course provides an introduction to the United States Air Force (USAF) and Space Force (USSF), hopefully encouraging students to pursue a career in the Department of the Air Force (DAF) or at least seek additional information to be better informed about the role of the USAF and USSF. The course allows students to examine general aspects of the DAF, leadership fundamentals, service benefits, and opportunities for officers. This course also lays the foundation for becoming an Airman or Guardian by outlining our heritage and values. As a foundational course, AS100 provides a historical perspective such as lessons on war and U.S. military, DAF operations, principles of war, and airpower. (A, CSU, UC)
1B AS100 HERITAGE AND VALUES  
1 unit, 1 lecture hour  
COREQUISITE: Aerospace Studies 3B.  
This course provides an introduction to the United States Air Force (USAF) and Space Force (USSF), hopefully encouraging students to pursue a career in the Department of the Air Force (DAF) or at least seek additional information to be better informed about the role of the USAF and USSF. The course allows students to examine general aspects of the DAF, leadership fundamentals, service benefits, and opportunities for officers. This course also lays the foundation for becoming an Airman or Guardian by outlining our heritage and values. As a foundational course, AS100 provides a historical perspective such as lessons on war and U.S. military, DAF operations, principles of war, and airpower. (A, CSU, UC)

2A AS200 TEAM AND LEADERSHIP FUNDAMENTALS  
1 unit, 1 lecture hour  
COREQUISITE: Aerospace Studies 3C.  
This course is designed to provide a fundamental understanding of both leadership and team building. Students are taught from the beginning that there are many layers to leadership, including aspects that do not always come to mind. Such things include listening, understanding themselves, being an effective follower, and efficient problem solving. Students will apply these leadership perspectives when completing team-building activities and discussing things like conflict management. Students should demonstrate basic verbal and written communication skills. Students will apply these lessons at Field Training, which follows AS200. (A, CSU, UC)

2B AS200 TEAM AND LEADERSHIP FUNDAMENTALS  
1 unit, 1 lecture hour  
COREQUISITE: Aerospace Studies 3D.  
This course is designed to provide a fundamental understanding of both leadership and team building. Students are taught from the beginning that there are many layers to leadership, including aspects that do not always come to mind. Such things include listening, understanding themselves, being an effective follower, and efficient problem solving. Students will apply these leadership perspectives when completing team-building activities and discussing things like conflict management. Students should demonstrate basic verbal and written communication skills. Students will apply these lessons at Field Training, which follows AS200. (A, CSU, UC)

3B AS100 LEADERSHIP LABORATORY  
1 unit, 3 lab hours, (Pass/No Pass)  
COREQUISITE: Aerospace Studies 1B.  
A practicum of Air Force customs and courtesies, dress and personal appearance, drill, issuing military commands, instructing, directing and evaluating these skills, studying the environment of an Air Force officer, and learning about opportunities available to commissioned officers. (A, CSU)

3C AS200 LEADERSHIP LABORATORY  
1 unit, 3 lab hours, (Pass/No Pass)  
COREQUISITE: Aerospace Studies 2A.  
A practicum of Air Force customs and courtesies, dress and personal appearance, drill, issuing military commands, instructing, directing and evaluating these skills, studying the environment of an Air Force officer, and learning about opportunities available to commissioned officers. (A, CSU)

3D AS200 LEADERSHIP LABORATORY  
1 unit, 3 lab hours, (Pass/No Pass)  
COREQUISITE: Aerospace Studies 2B.  
A practicum of Air Force customs and courtesies, dress and personal appearance, drill, issuing military commands, instructing, directing and evaluating these skills, studying the environment of an Air Force officer, and learning about opportunities available to commissioned officers. (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.  
Introduction to African-American Studies: a critical interdisciplinary study of African-American culture, history, and heritage from Pre Colonial West Africa through the 21st Century. This course will include an introduction to West African societies of the 15th and 16th centuries, prior to European Colonial Expansion; an examination of the transition into the era of African enslavement in Colonial America; an exploration of African American cultural development during the era of Reconstruction; an evaluation of African American political movements in response to social injustice and African American creative production; an analysis of the assimilation of African American culture into mainstream American culture during the 20th century; and finally, to examine and evaluate the African American community of the 21st Century. (A, CSU-GE, UC, I)
2 AFRICAN AMERICAN CULTURAL ADAPTATION
3 units, 3 lecture hours, (Formerly Cultural Studies 2)
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.
This survey of classic and contemporary African-American literature aims to promote understanding and appreciation of the complex African-American experience through the development of close reading, analysis, and well-organized writing skills. (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 (AHLTH)

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 101 and 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)

3 PUBLIC HEALTH AND INFECTIOUS DISEASE TRACING
1 unit, 1 lecture hour
PREREQUISITE: None.
Introductory course that will provide an overview of coronavirus disease 2019 (COVID-19), including incubation, infectious period, symptoms, and how to prevent it. The clinical presentation of COVID-19, and the evidence for how COVID-19 is transmitted from person-to-person and why contact tracing has traditionally been such an effective public health intervention. Students will learn how contact tracing is done, including how to build rapport with cases, identify their contacts, and learn how supporting both cases and their contact can effectively break the chain of disease transmission. The course will also cover several important ethical considerations around contact tracing, isolation, and self-quarantine. The course will identify some of the most common barriers to contact tracing efforts, along with strategies to overcome them. Case investigation and contact tracing are well-honed skills that adapt easily to new public health demands and are effective tools to slow the spread of infectious diseases in a community. (A, CSU, UC)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units, 3.33-33.3 lab hours
COREQUISITE: Allied Health 104. 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,  
(Formerly Allied Health 204)  
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

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. An interdisciplinary approach to examining pre- and post-settler-colonial American Indian societies and cultures. Studying the effects of invasion and colonization with an emphasis on self-preservation and maintaining tribal sovereignty. This course analyzes the racialization of American Indians, eurocentrism, relationship to place, forced assimilation, intergenerational trauma, Indigenous cosmology and ceremony, social justice, and self-determination. (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.  
An interdisciplinary approach examining American Indian cultures and art traditions of North America. Introducing pre-contact and early-contact-era traditions, spiritual practices, and the evolution of American Indian art forms in contemporary times. Exploring the concepts, designs, and techniques of Indigenous art of the Americas. Emphasis on North American Indian tribes and the impact of settler-colonial policy on the traditional Indigenous relationship to place. The art studied will begin from ancient Indigenous civilizations to contemporary art movements. This course also examines socio-political critiques expressed in post-modern Native American art that are responding to topics concerning Social Justice, Eurocentrism, Cultural Appropriation, and Primitivism. (A, CSU-GE, UC, I)

AMERICAN SIGN LANGUAGE  
SEE FOREIGN LANGUAGES

AMERICAN STUDIES (AMST)

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 LPPS 110) (A, CSU-GE, UC, I)

ANTHROPOLOGY (ANTHRO)

1 BIOLOGICAL ANTHROPOLOGY  
3 units, 3 lecture hours  
ADVISORY: 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: English 1A and Mathematics 201.
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: 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. 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: 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: English 1A, Mathematics 102, and knowledge of basic arithmetic recommended.
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)

8  LANGUAGE AND CULTURE
3 units, 3 lecture hours
ADVISORY: English 1A.
Introductory foundation for understanding language from an anthropological perspective, addresses how, what, when, where, why and with whom we communicate. Surveys three areas in linguistic anthropology: structural, historical, and sociocultural linguistics emphasizing the relationship between language and culture. Issues of language conservation and loss. (C-ID ANTH 130) (A, CSU-GE, UC, I)

12  VISUAL ANTHROPOLOGY: INTRODUCTION TO ETHNOGRAPHIC FILM
3 units, 3 lecture hours
ADVISORY: English 1A.
Introduction to the use of film by anthropologists as a research and educational tool. Films depicting different cultures from around the world are viewed and evaluated. Various attributes of ethnographic film are examined. (A, CSU, UC, I)

13  ANTHROPOLOGY OF MAGIC, WITCHCRAFT, AND RELIGION
3 units, 3 lecture hours
ADVISORY: English 1A.
A cross-cultural study of the forms and functions of supernatural beliefs and associated rituals in various societies. Emphasis is on understanding beliefs and rituals within their social contexts, and on broad comparisons to derive insights into the general functions of beliefs and rituals in human life. (A, CSU, UC)

15  LABORATORY METHODS IN ARCHAEOLOGY
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Anthropology 4. ADVISORY: English 1A, Mathematics 102, and knowledge of basic arithmetic recommended.
The archaeological laboratory and its relationship to archaeological project development and organization; artifact identification, analysis, and cataloging processes including lithic, ceramic, bone, historic and other artifact types. (A, CSU, UC)

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16A  FIELD ARCHAEOLOGY I
2 units, 1 lecture hours, 3 lab hours,
(Formerly Anthropology 6)
PREREQUISITE: Anthropology 4. ADVISORY: English 1A, Mathematics 102, and knowledge of basic arithmetic 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: English 1A, Mathematics 102, and knowledge of basic arithmetic 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: English 1A, Mathematics 102, and knowledge of basic arithmetic 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: 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: 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)
PREREQUISITE: None.
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 general computer skills for technical programs such as word processing, spreadsheet, presentation applications, and email. (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 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)
Employer and employee responsibility, federal and state legislation, 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)
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)
Course Descriptions

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130  INDUSTRIAL MATHEMATICS
3 units, 3 lecture hours, (Formerly Industrial Education 60)
PREREQUISITE: None.
Trade-related math problems including the use of signed numbers, fractions, ratios and proportions, percentages, algebraic expressions, 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
PREREQUISITE: None.
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
PREREQUISITE: None.
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
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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.

APPRENTICESHIP (APP)

100  FORKLIFT ORIENTATION INITIAL
2 units, 2 lecture hours, 0.5 lab hour,
(Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
An introduction to gain the understanding of current regulations, common type of Rough Terrain Variable Reach Lift trucks and understand why you conduct pre-shift inspections. Learn techniques for safe operation of Rough Terrain Variable Reach lift truck by hands-on operation and maneuvering accordance with OSHA Standard 29 CFR 1910.178(I). (A)

101  FUNDAMENTALS OF CONSTRUCTION
3.5 units, 3 lecture hours, 1.5 lab hours,
(Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
An introduction to provide the trainees with basic overview of the general practices of construction work, including safety, tools, techniques, terms, safe work habits and knowledge of the industry. In accordance with the CAL-OSHA CCR Title 8 and OSHA CFR 1926 Construction Standards that are applicable to courses being covered. (A)
102 HAZARDOUS WASTE REMOVAL INITIAL
2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
An introduction to instruct trainees in the types of hazards and situations that can be encountered on the job site. Trainees will learn protective measures, proper use of equipment and learn safety and health issues, in accordance with 29 CFR 1910.120, 132, 143, 146, and 1200. (A)

103 SAFETY CERTIFICATION
2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
Introduction to safety requirements set forth by the Occupational Safety and Health Administration (OSHA), Construction Industry Standards and General Standards, as they relate to the Construction Industry. Students may earn OSHA 10, OSHA 30, Cal-OSHA 10, and/or Cal-OSHA 30. (A)

104 AERIAL WORK PLATFORM INITIAL
0.5 unit, 0.25 lecture hour, 0.75 lab hour, (Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
An introduction to provide the trainees with the knowledge of current regulations, common type of aerial work platforms and understand the need to conduct pre-shift inspections. Learn techniques for safe operation and maneuvering. Teach trainees to work safely on and around self-propelled aerial work platforms, such as scissor-lifts and boom lifts. (A)

105 RIGGING AND SIGNALING
2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
Provide the trainees with an understanding of the safe approach to Rigging and Signaling. Describe and demonstrate the state procedures of Rigging and Signaling in accordance with OSHA CFR 1926.251 and 1926.5 Construction. (A)

106 SKID STEER LOADER ORIENTATION INITIAL
2 units, 2 lecture hours, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
An introduction to provide student trainees with a good understanding of how to operate mobile equipment, learn current safety procedures and proper maintenance of a skid steer loader (Bobcat). (A)

107 CONCRETE TECHNIQUES
3.5 units, 3 lecture hours, 1.5 lab hours, (Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
Familiarize students with concrete safety, its history, properties and components. It includes a hands-on portion in accordance with Cal-OSHA CCR Title 7 1712-1722 and OSHA CFR 1926.703. (A)

108 ASPHALT PAVING TECHNIQUES
3.5 units, 3 lecture hours, 1.5 lab hours, (Pass/No Pass)
PREREQUISITE: Registered Apprentice with LiUNA! Northern California District Council of Laborers.
An introduction to familiarize the trainees with the skills they need to work with Asphalt safely and learn the proper use of tools and equipment needed when working with Asphalt. (A)

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  
   2 units, 1 lecture hours, 4 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 ref-  
erence 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. Relation-  
ship 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, UC)  

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)  

22  ARCHITECTURAL PRACTICE II  
   3 units, 2 lecture hours, 3 lab hours  
PREREQUISITE: Architecture 12. ADVISORY: Architecture 24  
concurrently recommended.  
Continuation of Architecture 12. Further development of draft-  
ing practices and contract documents. Emphasis on light commercial  
materials and construction. Computer-aided drafting in commercial  
architectural applications. (A, CSU)  

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 architec-  
tural 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 ordinanc-  
es. (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, reflec-  
tion, 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 architectural 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)

ARMENIAN
SEE FOREIGN LANGUAGES

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, Neoclassicism, Realism, Impressionism, Cubism, Surrealism and other 20th century avant-garde movements. (C-ID ARTH 120) (A, CSU-GE, UC, I)
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.
An 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-GE, 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 experi-
mentation 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 appli-
cations 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, UC)

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 concentrat-
ed 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 world wide.
(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, UC)

40 PHOTOGRAPHY AS ART
3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
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, UC)

50 ARTS OF AFRICA, OCEANIA AND INDIGENOUS NORTH AMERICA
3 units, 3 lecture hours
PREREQUISITE: None.
An introduction to the visual arts and artistic traditions of Africa, Oceania and Indigenous North America. (A, CSU, UC)

52 INTRODUCTION TO DIGITAL ART/NEW MEDIA
3 units, 2 lecture hours, 4 lab hours
ADVISORY: Eligibility for English 1A recommended.
Introduces digital and new media art practice. Explores the use of digital technology as tool and medium with an emphasis on conceptual and expressive content. Provides a hands-on introduction to fundamental concepts and practices utilizing contemporary digital tools resulting in the creation of visual artworks. (A, CSU)

55 INTRODUCTION TO ASIAN ART
3 units, 3 lecture hours, (See also Asian American Studies 55)
PREREQUISITE: None.
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)

60 ART OF THE ANCIENT AMERICAS
3 units, 3 lecture hours, (See also Chicano-Latino Studies 22)
PREREQUISITE: None.
An introduction to the art and architecture 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. (C-ID ARTH 145) (A, CSU-GE, UC, I)

70 MODERN AND CONTEMPORARY ART
3 units, 3 lecture hours
ADVISORY: English 1A.
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, UC, I)

80 TOPICS IN ART
2 units, 2 lecture hours
PREREQUISITE: None.
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)

ASIAN-AMERICAN STUDIES (ASAMER)

1 INDO-CHINESE AMERICANS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
History, culture, and settlement in America of the peoples of Indo-China. The Vietnamese, Cambodian, Lao, and Hmong experience. (A, CSU-GE, UC, I)
CHINESE CULTURE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
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)

HMONG CULTURE
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
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)

INTRODUCTION TO ASIAN-AMERICANS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
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, intercultural relationships, family influences, discrimination and generational conflict. (A, CSU-GE, UC, I)

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)

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)

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

BASIC ACR
9 units, 4 lecture hours, 16 lab hours, (Day Program), (Formerly Body-Fender 51/52)
ADVISORY: Welding Technology 2A.
Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hands 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)

BASIC ACR
4.5 units, 2 lecture hours, 8 lab hours
ADVISORY: Welding Technology 2A.
Theory and practice in minor auto body repair. Principles of auto construction and design. Correct use and application of body shop hands 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 hands 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.
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. 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.
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
PREREQUISITE: Automotive Collision Repair 153A. ADVISORY: Welding Technology 2A.
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.

155 SPRAY REFINISHING
2 units, 1 lecture hour, 3 lab hours,
(Formerly Body-Fender 55)
PREREQUISITE: None.
Methods of prepping vehicles for spot repair and complete painting. Application of waterborne basecoat, solvent base coats and urethane 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, silicone bronze welding, aluminum welding, SRSW welding, plasma cutter, metal fabrication techniques, 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: English 1A and Mathematics 103.
Automotive components, service tools, and equipment. Designed for the prospective Career Technology Education (CTE) teacher and students needing an exploratory course in the automotive field. (A, CSU)
10 INTRODUCTION TO DIESEL TECHNOLOGY
3 units, 3 lecture hours
ADVISORY: English 1A and Mathematics 103.
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)
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)
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)
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)
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, 3 lecture hours, 10 lab hours, (See also Automotive Technology GM 55), (Formerly Automotive Mechanics 55)
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)
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.
Theory and practice in automotive heating, ventilation, and air conditioning systems/components. R-12, R-134A, and R-1234yf refrigeration systems, recovery, recycling, charging, leak, and performance testing. Diagnosis, service, and repair of the advanced 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: English 1A and Mathematics 103.
Designed for students to complete assigned automobile manufacturers' training modules: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Virtual Classroom Training (VCT) 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: English 1A.
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 Virtual Classroom Training (VCT) 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/PROPULSION SYSTEMS LABORATORY
1 unit, 4 lab hours
ADVISORY: English 1A and Mathematics 103.
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 Virtual Classroom Training (VCT) 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: English 1A.
Designed for students to complete assigned automobile manufacturers' training modules in Power Train Systems: Hands-On (HO), Computer-Based Training (CBT), Web-Based Training (WBT), and/or Virtual Classroom Training (VCT) 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
COREQUISITE: Automotive Technology 10. ADVISORY: English 1A and Mathematics 103.
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
COREQUISITE: Automotive Technology 10. ADVISORY: English 1A and Mathematics 103.
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)
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**Course Descriptions**

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**Automotive Collision Repair**

**63 DIESEL FUEL AND EMISSION SYSTEMS**

4 units, 1.5 lecture hours, 8 lab hours
COREQUISITE: Automotive Technology 10. ADVISORY: English 1A and Mathematics 103.
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
COREQUISITE: Automotive Technology 10. ADVISORY: English 1A and Mathematics 103.
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
COREQUISITE: Automotive Technology 10. ADVISORY: English 1A and Mathematics 103.
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
COREQUISITE: Automotive Technology 10. ADVISORY: English 1A and Mathematics 103.
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 62 and Automotive Technology 63. COREQUISITE: Automotive Technology 10. ADVISORY: English 1A.
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: English 1A and Mathematics 103.
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: English 1A and Mathematics 103.
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: English 1A and Mathematics 103.

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: English 1A and Mathematics 103.

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

Automotive essential laboratory to include: automotive components, service tools, procedures, and equipment. Designed for the prospective Career Technology Education (CTE) 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

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

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: English 1A and Mathematics 103.

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)

161 BAR SPECIFIED DIAGNOSIS AND REPAIR TRAINING
3 units, 2 lecture hours, 3 lab hours,
(Formerly Automotive Technology 61 and 261)
PREREQUISITE: Automotive Technology 52 or 53, or 9 semester units, 13 quarter units, or 180 hours of instruction at a ASE Education Foundation certified and/or bureau-recognized college or trade school in the areas of electrical and engine performance. ADVISORY: English 1A and Mathematics 103.

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. (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 161, or 10 semester units, 13 quarter units, or 180 hours of instruction at an ASE Education Foundation certified and/or bureau-recognized college or trade school in the areas of electrical and engine performance. ADVISORY: English 1A and Mathematics 103.  
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: English 1A and Mathematics 103.  
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  
0.5 unit, 4 lecture hours, 4 lab hours,  
(2 weeks), (Formerly Automotive Technology 261C)  
PREREQUISITE: Automotive Technology 161B. ADVISORY: English 1A and Mathematics 103.  
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: English 1A and Mathematics 103.  
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 (turbocharges/superchargers/nitrous). (A)

162B ADVANCED PERFORMANCE TUNING  
3 units, 2.5 lecture hours, 2 lab hours  
PREREQUISITE: Automotive Technology 162A. ADVISORY: English 1A and Mathematics 103.  
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 (turbocharges/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: English 1A and Mathematics 103.  
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: English 1A and Mathematics 103.  
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: English 1A and Mathematics 103.
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: English 1A and Mathematics 103.
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: English 1A and Mathematics 103.
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: English 1A and Mathematics 103.
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)

173 MAINTENANCE AND LIGHT REPAIR – CHASSIS SYSTEMS
8.5 units, 4 lecture hours, 12 lab hours
PREREQUISITE: None.
Basic skills and training in Maintenance and Light Repair for Chassis Systems needed to earn an entry-level position at an automotive maintenance repair facility. Prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test. (A)

174 MAINTENANCE AND LIGHT REPAIR – POWERTRAIN SYSTEMS
8.5 units, 4 lecture hours, 12 lab hours
PREREQUISITE: None.
Basic skills and training in Maintenance and Light Repair for Powertrain Systems needed to earn an entry-level position at an automotive maintenance repair facility. Prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test. (A)

281A AUTOMOTIVE POWER TRAINS I
3 units, 3 lecture hours, (Formerly Automotive Technology 81A)
PREREQUISITE: Automotive Technology 9 or National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
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 National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
The principles of automotive power train systems: automatic transaxles, 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 National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
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 National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
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 National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
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 National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
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 National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
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 National Institute for Automotive Service Excellence (ASE) current certifications or OEM (Original Manufacture Equipment) certifications or equivalent. ADVISORY: English 1A and Mathematics 103.
Engine design and operation including diagnosis, failure analysis, and service practices.

292 ASE CERTIFICATION PREPARATION
2 units, 2 lecture hours, (Formerly Automotive Technology 92)
PREREQUISITE: Automotive Technology 9 or equivalent. ADVISORY: English 1A and Mathematics 103.

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. ADVISORY: English 1A and Mathematics 103.
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. Student 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 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)
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: English 1A and Mathematics 103
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)
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)
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, 3 lecture hours, 10 lab hours,
(See also Automotive Technology 55),
(Formerly Automotive Technology General Motors 36)
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)
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: English 1A and Mathematics 103.
Theory and practice in automotive heating, ventilation, and air conditioning systems/components. R-12, R-134A, and R-1234yf 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, 4 lecture hours, 3 lab hours,
(Formerly Zoology 1)
PREREQUISITE: Mathematics 103 and Biology 11A. 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, 4 lecture hours, 3 lab hours,  
(Formerly Botany 1)  
PREREQUISITE: Mathematics 103 and Biology 11A. 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 within the last five years recommended. ADVISORY: English 1A.  
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)

11B  BIOLOGY FOR SCIENCE MAJORS II  
5 units, 4 lecture hours, 3 lab hours  
PREREQUISITE: Biology 11A and Mathematics 103 taken within the last five years recommended. ADVISORY: English 1A.  
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-veterinary, 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, completion within the last year recommended. ADVISORY: Eligibility for English 1A recommended.  
A foundation course in Human Anatomy. A systems-based approach, examining the gross and microscopic structures of the human body. Fulfills the anatomy requirement for many nursing and other health-related programs. (C-ID BIOL 110B) (A, CSU-GE, UC, I)

21A  HUMAN ANATOMY & PHYSIOLOGY I  
4 units, 3 lecture hours, 3 lab hours  
PREREQUISITE: Biology 5 or 11A. ANTI-REQUISITE: Biology 22. ADVISORY: English 1A.  
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)

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
3.5 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, UC, 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)
PREREQUISITE: None.
Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. Cross-listed with BT-5. (A, CSU)

10 INTRODUCTION TO BUSINESS
3 units, 3 lecture hours
ADVISORY: English 1A.
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: English 1A.
This is a law survey course with an emphasis on contract law. Other areas of law covered include civil procedure and ADR, constitutional law, administrative law, torts, criminal law and procedure, agency, labor and employment law, and international business law. A case study method is utilized along with a traditional lecture format. (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. ADVISORY: English 1A.
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: English 1A.
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)

25 INTERNATIONAL BUSINESS — AN INTRODUCTION
3 units, 3 lecture hours
ADVISORY: Business Administration 10.
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)

28 E-LAW AND ETHICS
3 units, 3 lecture hours
ADVISORY: English 1A.
This course is intended to look at information security, privacy, ethics, and the laws as they pertain to future software engineers, IT Professionals, and upcoming business owners who will employ the internet and adaptive technologies sometime within their perspective occupations. Topics range from intellectual property, copyright and patents, contract law, consumer rights and protections, consumer financial information, federal and state laws, computer, and network security, to computer forensics and investigation. The Software Engineering Code of Ethics is also highlighted within this course. (A, CSU)

30 PERSONAL FINANCE
3 units, 3 lecture hours
ADVISORY: Business Administration 10.
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, UC)

31 HUMAN RESOURCE MANAGEMENT
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and English 1A.
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 English 1A.
Multidisciplinary examination of how society, economics, and human behavior are intrinsically 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 30.
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 BUSINESS
3 units, 3 lecture hours
ADVISORY: Business Administration 10 and Mathematics 201.
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
ADVISORY: Business Administration 52 or equivalent experience creating, operating, or managing a startup or established business. English 1A.
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 English 1A.
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 English 1A.
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)

51  BUSINESS PLANNING AND NEW VENTURE LAUNCH
1.5 units, 1.5 lecture hours
ADVISORY: Business Administration 10 and English 1A.
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: English 1A.
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)

101  BASIC PROFESSIONAL AND CIVIC BEHAVIORS
0.2 unit, 0.27 lecture hour, (Pass/No Pass)
ADVISORY: Business & Technology 112.
Introduces basic mindsets, life, and work skills necessary for professional success and civic engagement. (A)

102  INTERMEDIATE PROFESSIONAL AND CIVIC BEHAVIORS
0.2 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
0.2 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
0.2 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: English 1A.
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 English 1A.
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.

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351 BUSINESS PLANNING AND NEW VENTURE LAUNCH
1.5 lecture hours, (Repeats = 2), (Pass/No Pass)
ADVISORY: Business Administration 10 and English 1A.
Business Plan development. Review of resources available to assist entrepreneurs in developing and launching a business including sources of funding.

BUSINESS & TECHNOLOGY (BT)

1 COMPUTER DOCUMENT PROCESSING I
3 units, 2 lecture hours, 3 lab hours,
(Formerly BSS 1A and Business Information Processing 1)
PREREQUISITE: None.
Producing basic correspondence, letters, memos, tables, and reports, using current word processing program, developing keyboarding speed and accuracy, and typing by touch. (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.
Producing and formatting specialized correspondence, letters, memos, reports, tables, and business forms using a current word processing program. Building typing speed and accuracy. (A, CSU)

5 WORKPLACE COMMUNICATION
3 units, 3 lecture hours, (See also Business Administration 5), (Formerly BSS 5 and Business General Office 5)
PREREQUISITE: None.
Professional workplace communication including written, oral, and presentation fundamentals with emphasis on organization, correctness, completeness, conciseness, and tone. Cross-listed with BA-5. (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.
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.
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. (A, CSU)

10 COMPUTER APPLICATIONS II
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Business & Technology 9.
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. (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  
PREREQUISITE: None.  
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)  
PREREQUISITE: None.  
Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. Crosslisted with CIT-31. (A, CSU)

25  MICROSOFT OFFICE  
3 units, 3 lecture hours, 1 lab hour,  
(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), (Formerly Business Information Processing 26)  
PREREQUISITE: Computer Information Technology 15.  
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.  
Basic features of Microsoft Word. Designed to equip students with the skills to prepare personal correspondence and reports. (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 equivalent recommended.  
Advanced features of Microsoft Word. Designed for office personnel using Microsoft Word on the job. (A, CSU)

31  21ST CENTURY WORKFORCE SKILLS  
1.5 units, 1.5 lecture hours, (Formerly Business & Technology 32)  
PREREQUISITE: None.  
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.  
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, 1.5 lecture hour, 1.5 lab hours,  
(Formerly Business Information Processing 6 and Business & Technology 6)  
PREREQUISITE: None.  
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)

120 RESUME/INTERVIEW
1 unit, 1 lecture hour, (Formerly Business General Office 59 and 59A and Business & Technology 20)
PREREQUISITE: None.
Development of job-seeking skills for students preparing to enter the workforce. Creating marketable resumes and practicing steps for winning interviews. (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)
PREREQUISITE: None.
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
PREREQUISITE: None.
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
PREREQUISITE: None.
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)
PREREQUISITE: None.
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
PREREQUISITE: None.
Practical, project-based course to enhance one's ability to gain and retain both customers and quality employees. (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 and 28.
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
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
Interpret health insurance plans, complete various medical forms used in a medical office, and utilize ICD-10 and CPT codes. (A)

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 = 3)
PREREQUISITE: None.
Introduction of word processing features in various software platforms. Designed to equip students with the skills to prepare basic personal correspondence.

331 21ST CENTURY WORKFORCE SKILLS
1.5 lecture hours
PREREQUISITE: None.
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.

332 CUSTOMER SERVICE IN THE ONE-PERSON OFFICE
2 lecture hours, 3 lab hours, (Repeats = 3)
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 human relations, career document preparation, resume and interview and professional appearance. 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
4 lab hours, (Repeats = 3), (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
1.56 lab hours, (Repeats = 3), (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
1.78 lecture hours, 2.67 lab hours, (Repeats = 3), (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
3.3 lab hours, (Repeats = 3), (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 = 3), (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
0.84 lecture hour, 0.83 lab hour, (Repeats = 3), (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.

379 INTRODUCTION TO MICROSOFT OFFICE APPLICATIONS
1 lecture hour, 1.5 lab hours, (Repeats = 3), (Pass/No Pass)
PREREQUISITE: None.
Hands-on overview of essential Microsoft Office applications including Outlook, Word, Excel, Access, and PowerPoint.

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 3A 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; VSEPR theory; valence bond (hybridization) and molecular orbital theories; intermolecular forces; properties of liquids; solids and crystal structures; solution behavior; colligative properties; associated laboratory experiments; and volumetric (titrimetric) and gravimetric analysis methods. (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 3A or 103. 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, kinetic molecular, 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.

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.

99  SCIENTIFIC COMMUNICATION
2 units, 2 lecture hours
ADVISORY: Biology 11A, Chemistry 1A, or Physics 4A.
Designed for students who have taken CHEM 1A, PHYS 4A, or BIOL 11A and wish to transfer for a science degree or pursue a career in the sciences. Focus on scientific communication. Techniques covered will include reading and evaluating literature, scientific writing, and presentations. (A, CSU)

100I  CHEMICAL LABORATORY INTERNSHIP
2-6 units, 6-18 lab hours
COREQUISITE: Chemistry 18L or 20.
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: English 1A.
The introductory course explores the Chicano/a/x and Mexican American community, culture(s), and heritage(s) in American society from an interdisciplinary approach. Focus on sociocultural challenges, struggles, and social justice movements that define the Chicano/a/x experience. Examination of the ancestral roots, dynamic migration/immigration trends, conflict, racialization processes, liberation struggles, socialization process, and sociopolitical patterns from ancient Indigenous civilizations of Mesoamerica to the present. Overview of trends and patterns in Latino/a/x populations at-large will also be explored. (A, CSU-GE, UC, I)

12A  MEXICAN AMERICAN HISTORY: FROM MESOAMERICA TO THE MEXICAN AMERICAN WAR
3 units, 3 lecture hours
ADVISORY: English 1A.
A survey of Mexican American history from the ancient Indigenous civilizations of Mesoamerica to the Mexican American War of 1846-48. Special emphasis is placed on American History from 1492 into the mid 1800’s, and upon understanding the historical and contemporary dynamics of colonialism and imperialism. Introduction of concepts such as race, racism, racialization, white supremacy, settler colonialism, indigeneity and mestizaje. Focus on the impact of European arrival in the Americas, the history of Indigenous, African, and mixed-race people in the formation of Mexico. Spanish and Mexican settlement in what would become the U.S. Southwest, and the early history of Mexicans in the United States. (A, CSU-GE)
12B MEXICAN AMERICAN HISTORY: FROM THE MEXICAN-AMERICAN WAR TO THE PRESENT
3 units, 3 lecture hours
ADVISORY: English 1A.
A survey of Mexican American history from the Mexican-American War of 1846-48 to the present, with an emphasis on understanding the historical and contemporary dynamics of racism and white supremacy. Introduction of concepts such as race, racism, racialization, eurocentrism, settler colonialism, indigeneity and self-determination. Focus on the history of people of Mexican descent in the United States, and exploration of topics such as the Mexican-American War and its aftermath, interpersonal and institutional racism, segregation, immigration and the border, the Zoot Suit Riots and Chicano/a/x participation in WWII, and the many facets of the Chicano/a/x Civil Rights Movement. Introduction to the study of U.S.-Mexico relations, 1848-present. (A, CSU-GE)

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)

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 & Inca. (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.
This course offers an interdisciplinary analysis of Chicana and Mexican American women in contemporary society. Special emphasis is placed on the role and impact of family, church, education, economics, and politics. An exploration of gender, sexuality, racialization and intersectionality will occur as well as a critical review of how struggle, resistance, racial and social justice, solidarity, and liberation emerge in Chicana experiences. (A, CSU-GE, UC)
33 COMMUNITY INVOLVEMENT: SERVICE LEARNING
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A recommended.
Service learning in community, civic, or legal setting from a Chicano/a/x Studies and community-based perspective and approach. Develop a working understanding of issues impacting the political, economic, and social fabric of the Chicano/a/x community. Civic engagement related to coursework utilizing practical applications of course concepts. (A, CSU-GE, UC)

CHILD DEVELOPMENT (CHDEV)

1 PRINCIPLES AND PRACTICES OF TEACHING YOUNG CHILDREN
3 units, 3 lecture hours
ADVISORY: English 1A.
Historical context and theoretical perspectives of developmentally appropriate practice in early care and education. Examines the role of the early childhood educator, identification of best practices for environmental design, curriculum, and teaching strategies. Explores teacher child relationships, professional ethics, career pathways and professional standards. (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: English 1A.
An overview of knowledge and skills related to providing appropriate curriculum and environments for young children. Examines a teacher's role in supporting development and learning for all young children. Explores strategies for developmentally-appropriate practice based on observation and assessments 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: English 1A.
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: English 1A.
Introduction to laws, regulations, standards, policies and procedures and early childhood curriculum related to child health, safety, and nutrition in early childhood settings. 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: English 1A.
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: English 1A.
Foundational 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: English 1A.
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, the identification and referral process and community resources. (A, CSU)

12 CHILD ABUSE
3 units, 3 lecture hours, (See also Psychology 12)
ADVISORY: English 1A.

15 DIVERSITY AND CULTURE IN EARLY CHILDHOOD EDUCATION PROGRAMS
3 units, 3 lecture hours
ADVISORY: English 1A.
This course will examine the influences on development of children’s social identities. Examination of culturally relevant and linguistically appropriate anti-bias approaches supporting all children. Reflection on one’s own understanding of diversity in order to inform teaching practices and/or program development. (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: Child Development 11 and 17A, and English 1A.
The study of infants and toddlers with atypical development, trauma history, infant mental health challenges 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: English 1A.
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 1, 6, and 39. ADVISORY: English 1A.
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. ADVISORY: English 1A.
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: English 1A.
Appropriate use of assessment, observation, and recording strategies; documentation of development and learning; collaboration with families and professionals; use of rating systems, portfolios, and multiple assessment tools to plan learning environments and experiences. (C-ID ECE 200) (A, CSU)

30 CHILD, FAMILY, AND COMMUNITY
3 units, 3 lecture hours
ADVISORY: English 1A.
The process of socialization focusing on the interrelationship of family, school and community. Examines the influence of multiple societal contexts. Explores the role of collaboration between family, community, and schools in supporting children’s development. (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: English 1A.
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: English 1A.
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: English 1A.
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)
Course Descriptions

39 CHILD GROWTH AND DEVELOPMENT
3 units, 3 lecture hours, 1 lab hour, (See also Psychology 39)
ADVISORY: English 1A. Verification of freedom from tuberculosis.
Optional verification of immunization against influenza.
Examines the major physical, cognitive, social and emotional developmental milestones for children from conception through adolescence. Emphasis on interactions between maturational processes and environmental factors. Students will observe children, evaluate individual differences, and analyze characteristics of development at various stages according to developmental theories. 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: English 1A.
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: English 1A.
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: English 1A.
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: English 1A.
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: English 1A.
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 SUPPORTING CHILDREN WITH CHALLENGING BEHAVIORS
3 units, 3 lecture hours
ADVISORY: English 1A.
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: English 1A.
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: English 1A.
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, remediating, 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: English 1A.
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: English 1A.
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: English 1A.
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)

8 GROUP COMMUNICATION
3 units, 3 lecture hours, (Formerly Speech 8)
ADVISORY: English 1A.
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: English 1A. Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
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-GE, UC, I)

10 INTERCULTURAL COMMUNICATION
3 units, 3 lecture hours
ADVISORY: English 1A.
Introduction to the cultural variables and factors in the communication process. Emphasis given to effective communication in diverse social and professional environments. Analysis and comparisons of message perception, verbal and nonverbal communication, communication climates and language interpretation in interactions between people from different cultures. Activities to develop communication skills that improve competence in intercultural situations. (A, CSU, UC) (C-ID COMM 140)

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)
ARGUMENTATION
3 units, 3 lecture hours, (Formerly Speech 25)
ADVISORY: English 1A.
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)

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)
PREREQUISITE: None.
Competitive and practical experience in debate and public speaking. In addition to the class or activity hour each week on campus, students must attend intercollegiate tournaments for a specified number of days. (C-ID COMM 160B) (A, CSU)

COMPUTER AIDED DRAFTING AND DESIGN (CADD) SEE ALSO DRAFTING

2D CAD I
3 units, 2 lecture hours, 3 lab hours,
(Formerly Drafting 42 and 32)
ADVISORY: English 1A.
Creating and modifying digital drawings for the architectural, engineering, mechanical, manufacturing and other related industries. (A, CSU)

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: English 1A.
CAD generated 2D sketches, 3D solid models, assemblies and detailed drawings for the mechanical and manufacturing industries. Design topic included. (A, CSU)

MECHANICAL DRAWING I
3 units, 2 lecture hours, 3 lab hours
ADVISORY: 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)

2D CAD II
3 units, 2 lecture hours, 3 lab hours
COREQUISITE: 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)

3D SOLID MODELING II
3 units, 2 lecture hours, 3 lab hours
(Formerly Computer Aided Drafting and Design 36)
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)

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)

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)

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 assemblies. 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)

MECHANICAL DRAWING III
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Computer Aided Drafting and Design 28.
COREQUISITE: Computer Aided Drafting and Design 36A.
Project design using various CAD systems. Portfolio creation including presentation models. Industry Certified Exams. (A, CSU)
COMPUTER AIDED MANUFACTURING (CAM)

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 perform 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. (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. (C-ID ITIS 120) (A, CSU, UC)

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)
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)

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. (C-ID ITIS 180) (A, CSU)

31 **BEGINNING EXCEL**
   1 unit, 1 lecture hour, 1 lab hour, (See also Business & Technology 24), (Formerly Information Systems 24 and 74)
   PREREQUISITE: None.
   Creating a worksheet, formatting the worksheet, using formulas and functions, enhancing the display of workbooks, and creating graphs. Cross-listed with BT-24. (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**
   4 units, 4 lecture hours, 1 lab hour,
   (Formerly Information Systems 238, Computer Information Technology 238, and Computer Information Technology 48)
   ADVISORY: Computer Information Technology 15.
   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. (C-ID ITIS 110) (A, CSU)

49 **SWITCHING, ROUTING, AND WIRELESS ESSENTIALS**
   3 units, 2 lecture hours, 4 lab hours
   PREREQUISITE: Computer Information Technology 45.
   Switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. Students will perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. (C-ID ITIS 151) (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. (C-ID ITIS 155) (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 Electrical Systems Technology 62.
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
PREREQUISITE: Computer Information Technology 15.

58B COMPUTER FORENSICS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Computer Information Technology 15.
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.
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+ certified. 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.
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.
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.
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. (C-ID ITIS 164) (A, CSU)
59  LINUX SYSTEM ADMINISTRATION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Computer Information Technology 48A and 48B.
Provides a technical overview of the Linux operating system, including hands-on experience with commands, files, and tools. Topics include basic Linux commands, files and directories, text editing, electronic mail, pipes and filters, X Windows, shell environments, and scripting. Required for students wishing to pursue the Linux track preparing for industry certification. (C-ID ITIS 155) (A, CSU)

60  BEGINNING VISUAL BASIC
4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 35 and 47)
ADVISORY: Computer Information Technology 48A and 48B.
Provides a technical overview of the Linux operating system, including hands-on experience with commands, files, and tools. Topics include basic Linux commands, files and directories, text editing, electronic mail, pipes and filters, X Windows, shell environments, and scripting. Required for students wishing to pursue the Linux track preparing for industry certification. (C-ID ITIS 130) (A, CSU)

63  BEGINNING JAVA PROGRAMMING
4 units, 4 lecture hours, 1 lab hour,
(Formerly Information Systems 33 and 39)
ADVISORY: 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. (C-ID ITIS 130) (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. (C-ID ITIS 130) (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)

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 websites 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. (C-ID ITIS 130) (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.
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. (A, CSU, UC)

26 DISCRETE MATHEMATICS FOR COMPUTER SCIENCE
4 units, 3.5 lecture hours, 2 lab hours
PREREQUISITE: Computer Science 40 and Mathematics 4A.
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)
Introduction to problem solving, algorithm development, procedural and data abstraction using the C++ language; program design, coding, debugging, testing, and documentation. (C-ID COMP 122) (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.
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. (C-ID COMP 132) (A, CSU, UC)

45 COMPUTER ARCHITECTURE AND ORGANIZATION
4 units, 3.5 lecture hours, 2 lab hours
PREREQUISITE: Computer Science 40.
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 DISABLED 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)
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)

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)

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)

149 INTRODUCTION TO CONSTRUCTION
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Construction 149. Eligibility for 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, (See also Electrical Systems Technology 175A)
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)

175B RESIDENTIAL WIRING 2
4 units, 3 lecture hours, 3 lab hours, (See also Electrical Systems Technology 175B)
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. Construction 175BL 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-GE, 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, UC)

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.

350 COLLEGE TRANSITION AND SUCCESS
1 lecture hour, (Open Entry/Open Exit)
PREREQUISITE: None.
Designed to provide students with personal and academic support during the transition to 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.
CRIMINOLOGY (CRIM)
FORMERLY ADMINISTRATION OF JUSTICE

1 INTRODUCTION TO CRIMINOLOGY
3 units, 3 lecture hours, (Formerly Administration of Justice 1)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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 of 7)
PREREQUISITE: None.
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)
PREREQUISITE: None.
Techniques, procedures, and ethical considerations involved in criminal 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: Criminalology 8.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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 THE PSYCHOLOGY OF CRIMINAL BEHAVIOR
3 units, 3 lecture hours, (See also Psychology 18)
ADVISORY: English 1A.
Focus on the biological, psychological, developmental, social, and cultural factors that influence the development of criminal behavior. Understand the relationship between psychological disorders outlined in the current Diagnostic and Statistical Manual of Mental Disorders, as well as psychopathy and sociopathy, and their influence on the development of criminal behavior. Explore the relationship between social inequities and the criminal justice system. Discuss the extent to which therapy and/or rehabilitation affects recidivism rates. (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 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)
PREREQUISITE: None.
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)

23 CORRECTIONAL INTERVIEWING AND COUNSELING
3 units, 3 lecture hours
PREREQUISITE: None.
Overview of the techniques in counseling and interviewing available to practitioners in corrections; 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
PREREQUISITE: None.
The 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)

28 PROBATION AND PAROLE
3 units, 3 lecture hours
PREREQUISITE: None.
Examine the history, development, and current practices of probation and parole, analyze the current trends and issues of community-based corrections and alternatives for offenders. (A, CSU)
36 **GANGS AND CORRECTIONS**  
3 units, 3 lecture hours  
PREREQUISITE: None.  
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)

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**DANCE (DANCE)**

8 **HIP HOP TECHNIQUE**  
1 unit, 3 lab hours  
PREREQUISITE: None.  
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, UC)

8B **INTERMEDIATE HIP HOP TECHNIQUE**  
1 unit, 3 lab hours  
PREREQUISITE: Dance 8.  
Intermediate technique and style of Hip Hop dance both historical and current emphasizing musicality, rhythms, and the movement required to develop intermediate Hip Hop skills. (A, CSU, UC)

9 **DANCE CONDITIONING**  
1 unit, 3 lab hours  
PREREQUISITE: None.  
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)  
PREREQUISITE: None.  
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.  
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)

12 **BEGINNING BALLET PART 1**  
1 unit, 3 lab hours, (Formerly Dance 12 and Physical Education 26)  
PREREQUISITE: None.  
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.  
Pre-intermediate-level technique of classical Ballet using barre exercises and center work, learning more Ballet technique and terminology for the pre-intermediate students. (A, CSU, UC)

13A **INTERMEDIATE BALLET TECHNIQUE**  
1.5 units, 1 lecture hour, 2 lab hours  
PREREQUISITE: Dance 12B or appropriate dance experience as determined by instructor.  
Intermediate level Ballet technique using barre exercises and center works, may include the 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 appropriate dance experience as determined by instructor.  
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)  
PREREQUISITE: None.  
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.
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
PREREQUISITE: None.
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.
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: Dance 10A.
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. 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, UC)

20B  INTERMEDIATE MODERN DANCE COMPOSITION
3 units, 2 lecture hours, 3 lab hours,
(Formerly Physical Education 20B)
PREREQUISITE: Dance 20A.
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  FALL DANCE CONCERT 1
2-4 units, 1 lecture hour, 3-9 lab hours per unit,
(Formerly Physical Education 21)
PREREQUISITE: For Choreographers: Demonstration of comparable skill level to be determined by Artistic Director through testing and/or video portfolio of past Modern Dance, Jazz, or Ballet performance work. For Performers: previous Modern dance, Jazz, or Ballet experience or concurrent enrollment in Ballet, Jazz, or Modern dance.
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)
### Dance

#### 22 SPRING DANCE CONCERT 1
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:** For Choreographers: Demonstration of comparable skill level to be determined by Artistic Director through testing and/or video portfolio of past Modern Dance, Jazz, or Ballet performance work. For Performers: Current intermediate competency in Ballet, Jazz, or Modern Dance or concurrent enrollment in Ballet, Jazz or Modern Dance.

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, 22, 31, or 32.

Preparation of dance participants for attendance at the American College Dance Festival. Participation in master classes and participation/attendance at adjudication concerts. Participation/coordination of FCC National Dance Day Event. (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)

#### 28A INTERMEDIATE MODERN DANCE TECHNIQUE
1.5 units, 1 lecture hour, 2 lab hours,  
(Formerly Dance 28.)

**PREREQUISITE:** Dance 10B.

Intermediate-level modern dance, emphasis on inverted movement, fast-pace locomotor patterns, and weight sharing. (A, CSU, UC)

#### 28B PRE-ADVANCED MODERN DANCE TECHNIQUE
1.5 units, 1 lecture hour, 2 lab hours  
**PREREQUISITE:** Dance 28A.

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, modern, and jazz 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 FALL DANCE CONCERT 2
2-4 units, 1 lecture hour, 3-9 lab hours  
**PREREQUISITE:** Dance 21.

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 SPRING DANCE CONCERT 2
2-4 units, 1 lecture hour, 3-9 lab hours  
**PREREQUISITE:** Dance 22.

Intermediate/advanced-level dance technique and conditioning, improvisation, choreography, rehearsal, and performance for formal theatrical presentation. Includes opportunities for support activities for the production. (A, CSU-GE, UC)
DECISION SCIENCE (DS)

10 INTRODUCTION TO DATA SCIENCE
3 units, 3 lecture hours, 1 lab hour
ADVISORY: English 1A or 1AH.
An Introduction to the foundations of data science from three perspectives: inferential thinking, computational thinking, and real-world relevance. The course teaches critical concepts and skills in computer programming and statistical inference in conjunction with hands-on analysis of real-world datasets, as well as social issues surrounding data analysis such as privacy and design. (A, CSU, UC)

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)

25 BUSINESS ANALYTICS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Decision Science 23, Mathematics 11, Mathematics 42, or Psychology 42.
Deeper dive into topics introduced in introductory statistics and data sciences courses with an emphasis on application to real-world problems. (A, CSU, UC)

40 INTRODUCTION TO R PROGRAMMING FOR DATA SCIENCE
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Decision Science 23, Mathematics 11, Mathematics 42, or Psychology 42.
Learn to program using the R programming language to manipulate data and summarize it using statistical and graphical functions. (A, CSU, UC)

44 INTRODUCTION TO PREDICTIVE MODELING
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Decision Science 21 and 23.
Predictive analytics project life cycles, data preparation, feature design, and model deployment. (A, CSU, UC)

55 VISUALIZING DATA
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: Decision Science 23, Mathematics 11, Mathematics 42, or Psychology 42.
Learn to create a variety of dashboard and graphics to display data using a variety of software packages such as Tableau, R or Python. (A, CSU)

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 ASSISTING (DA)

1 PRACTICE MANAGEMENT
2 units, 2 lecture hours
PREREQUISITE: None.
Dental office management procedures, oral and written communication, purchasing, inventory and cost control of supplies, accounts payable and receiving, insurance billing, HIPAA, treatment planning and case presentation, electronic health records, scheduling of appointments, resume and interviewing skills. Legal parameters regarding state regulations and functions of dental auxiliaries. (A, CSU)
2 INFECTION CONTROL FOR THE DENTAL SETTING
2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: None.
Principles of human anatomy, histology, and physiology as it relates to the head, neck and body systems in dentistry. Microbiology as it relates to the control of infection and disease, as well as bloodborne pathogen standards including sterilization and disinfection within the dental environment. Instruction on Dental Board of California (DBC), Occupational Health and Safety Administration (OSHA) regulations, and Center for Disease Control (CDC) and American Dental Association (ADA) recommendations. (A, CSU)

3 DENTAL RADIOLOGY
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Principles of radiology including history and current concepts relating to the production and projection of film and digital dental radiographs. Physics of radiation, biologic effects, and principles of radiology safety and standard precautions associated with radiation exposure, including bitewing, bisection and paralleling techniques. Laboratory portion of study, students expose, process mount and evaluate dental radiographs for diagnostic purposes. (A, CSU)

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
3 units, 3 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 SPECIALTIES
1.5 units, 1.5 lecture hours; (Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13.
COREQUISITE: Dental Hygiene 5C, 7B, 8B, 9 and 14.
The history and relationship of dental specialties within the broad scope of dentistry. Current concepts and future possibilities relevant to the practice of dental specialties; and dental hygienist’s ethical and clinical responsibility in the treatment of periodontal disorders. Relationship of the dental specialty practice of periodontics within the broad scope of dentistry. (A, CSU)
2DENTAL MATERIALS
2 units, 1 lecture hour, 3 lab hours,  
(Spring, first year)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 5, A, 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
6 units, 4 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)

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)
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE: Dental Hygiene 1B, 2, 6A, 8A, 11 and 12.
Beginning experience in the dental hygiene process of care for treatment of pediatric, adolescent and adult patients; various clinical procedures including scaling and polishing techniques, oral inspection, dental and periodontal charting, principles of powered instrumentation, radiographic techniques, biofilm control instructions, and application of preventive agents. (A, CSU)

5B CLINICAL DENTAL HYGIENE II
5 units, 16 lab hours,  
(Fall, second year)
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)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 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 site specific chemotherapeutic agents. (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, 6A, 8A, 11 and 12.
Prevention of emergency situations; management of dental and medical emergencies. CPR certification reviewed. (A, CSU)

6B PHARMACOLOGY
2 units, 2 lecture hours,  
(Fall, second year)
PREREQUISITE: Dental Hygiene 1B, 2, 5A, 6A, 8A, 11 and 12. COREQUISITE: Dental Hygiene 1C, 5B, 7A and 13.
Sources, dosages, therapeutic action, and side effects of drugs used in dentistry; classification, administration, and effects of drugs; pharmacology, and pharmacokinetics of drugs. (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
2 units, 2 lecture hours,  
(Spring, second year)
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. COREQUISITE: Dental Hygiene 1D, 5C, 8B, 9 and 14.
Community dental health; implementation of target group dental health project; tobacco cessation program; health care delivery systems; presentation of dental care methods; community outreach community, fluoridation and bio-statistics. (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, 5C, 7B, 8B 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)  
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. CORE- 
QUISITE: Dental Hygiene 1D, 5C, 7B, 8B and 14. 
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  PAIN MANAGEMENT  
4 units, 2 lecture hours, 6 lab hours,  
(Spring, first year)  
PREREQUISITE: Dental Hygiene 1A, 3A, 4 and 10. COREQUISITE:  
Dental Hygiene 1B, 2, 5A, 6A, 8A and 12.  
Concepts of pain and pain control; anatomy of the trigeminal 
nerve, physiology of nerve conduction, and the blockage of nerve 
impulses. Pharmacology and physiology of topical and local anesthetic 
agents and nitrous oxide/oxygen gas. Preparation of the armamentarium 
for local anesthetic injections and techniques of regional anesthesia in 
dentistry. Clinical application and performance of topical, supraperi-
osteal and block techniques to anesthetize the oral cavity. Preparation 
of the armamentarium and techniques for the administration of nitrous 
oxide-oxygen analgesia in dentistry. Therapeutic action, side effects, 
overdose and management procedures of anesthetic drugs, analgesic 
gases and sedation drugs in dentistry. (A, CSU)

12  CLINICAL SEMINAR TOPICS I  
2 units, 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 en-
countered 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, (9 weeks), 
(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, (9 weeks),  
(Fall, second year)  
PREREQUISITE: Dental Hygiene 1C, 5B, 6B, 7A and 13. CORE- 
QUISITE: Dental Hygiene 1D, 5C, 7B, 8B and 9.  
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 solv-
ing 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  
0.2-1 unit, 1.3-9 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 com-
pletion 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 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 CAREER AWARENESS
4 units, 4 lecture hours, (Pass/ No Pass)
ADVISORY: Counselor placement.
Emphasizes the development of tools, ideas, and strategies designed to be the blueprints 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. Designed for students with disabilities.

252A COMMUNICATION SKILLS AND STRATEGIES 1
4 units, 4 lecture hours, (Pass/ No Pass)
ADVISORY: Counselor placement.
Emphasizes developing foundational communication skills and social skills at home, school, and in the community, using a variety of basic skills. Expanding basic communication skills including the various ways people communicate, appropriate versus inappropriate communication, the different messages we send, styles of communication, and using communication for general conflict resolution. Designed for students with disabilities.

252B COMMUNICATION SKILLS AND STRATEGIES 2
4 units, 4 lecture hours, (Pass/ No Pass), (Formerly Developmental Services 252)
ADVISORY: Counselor placement.
Emphasizes developing strategies in the workplace and personal life related to personal disability, work ethics, communication and socialization important for employment. Expanding communication skills as a vehicle for solving problems. Designed for students with disabilities.
260 JOB SEARCH, EMPLOYMENT PORTFOLIO, AND INTERVIEW DEVELOPMENT
3 units, 3 lecture hours, 1 lab hour, (Pass/No Pass), (Formerly Developmental Services 60)
ADVISORY: Counselor placement.
Emphasizes the development of job search strategies including online applications, social networking sites, internet job search sites, creating and utilizing a professional network. 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 develop and maintain a job search log during their job search process. Designed for students with disabilities.

262 GROUP INTERACTION
3 units, 3 lecture hours, (Pass/No Pass), (Formerly Developmental Services 62)
ADVISORY: Counselor placement.
Development and improvement of self-understanding through group interactions. Designed for students with disabilities.

264 TRANSITION TO COLLEGE FOR STUDENTS WITH DISABILITIES
1 unit, 1 lecture hour, (Pass/No Pass)
ADVISORY: Counselor placement.
Assist students with disabilities in preparing for initial semester in a community college. Navigation of State Center Community College District campuses, 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. Designed for students with disabilities.

272 CONSUMER SKILLS
2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 72)
ADVISORY: Counselor placement.
Emphasis on home and money management, health, hygiene and safety, and food and nutrition. Designed for students with disabilities.

273 INDEPENDENT LIVING SKILLS FOR STUDENTS IN DSP&S
2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 73)
ADVISORY: Counselor placement.
Basic independent living skills: including appropriate social interaction, self-advocacy, self-care, community involvement, personal choice and managing life events. Designed for students with disabilities.

275 HORTICULTURE SKILLS I
2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 75)
ADVISORY: Counselor placement.
Basic techniques of foliage plant care and growing vegetables and ornamentals, with emphasis on transferable employment skills. Designed for students with disabilities.

276 HORTICULTURE SKILLS II
2 units, 6 lab hours, (Pass/No Pass), (Formerly Developmental Services 76)
Intermediate techniques of foliage plant care and growing vegetables with emphasis on transferable employment skills. Designed for students with disabilities.

277 BEGINNING COMPUTER LITERACY
4 units, 4 lecture hours (Pass/No Pass), (Formerly Developmental Services 77)
ADVISORY: Counselor placement.
Introduction to computers and commonly used microcomputer applications. Emphasis on computer use and adaptation. In depth coverage of computers and their impact in society. Designed for students with disabilities.

278 BASIC WORD PROCESSING FOR WORK
3 units, 3 lecture hours, 1 lab hour, (Pass/No Pass), (Formerly Developmental Services 78)
ADVISORY: Counselor placement.
Basic word processing terminology and understanding of Microsoft Word. Designed for students with disabilities.

279 BASIC MODIFIED COMPUTER APPLICATIONS
3 units, 3 lecture hours, 1 lab hour, (Pass/No Pass), (Formerly Developmental Services 79)
ADVISORY: Counselor placement.
Expansion and enhancement of word processing, data management, spreadsheet, and other highly marketable microcomputer applications. Designed for students with disabilities.
282 GREENHOUSE WORKFORCE PREP
3 units, 9 lab hours, (Pass/No Pass),
(Formerly Developmental Services 82)
ADVISORY: Developmental Services 275 and 276.
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.

283 READING COMPREHENSION 1
4 units, 4 lecture hours, (Pass/No Pass),
(Formerly English 77 and English 277)
ADVISORY: Counselor placement. Prior to entering this course, students should be comfortable reading beginning college level material. Not recommended for students learning English as a second language.
Development of basic reading readiness skills through learning main ideas and important details; builds on already existing reading skills. Prepares students for DEVSER 284.

284 READING COMPREHENSION 2
4 units, 4 lecture hours, (Pass/No Pass),
(Formerly English 78 and English 278)
PREREQUISITE: Developmental Services 283. ADVISORY: Counselor placement. Not recommended for students learning English as a second language.
Further development of reading skills and strategies while developing literal and critical comprehension. Designed for students with disabilities.

285 PARAGRAPHS TO ESSAYS
2.5 units, 2 lecture hours, 2 lab hours,
(Pass/No Pass), (Formerly English 81 and English 281)
ADVISORY: Counselor placement. Prior to entering this course, it is recommended that students be able to compose an organized paragraph. Not recommended for students learning English as a second language.
Development of a basic understanding of paragraph and essay structures. Identification of possible essay topics and develop an ability to find and correct grammatical errors. Designed for students with disabilities. Prepares students for DEVSER 286.

286 ESSAY DEVELOPMENT AND COLLEGE WRITING
2.5 units, 2 lecture hours, 2 lab hours,
(Pass/No Pass), (Formerly English 82 and English 282)
PREREQUISITE: Developmental Services 285. ADVISORY: Counselor placement. Prior to entering this course, it is recommended that students be able to compose a short, organized essay. Not recommended for students learning English as a second language.
Further development of college writing skills through composition, revision, and beginning research strategies. Designed for students with disabilities.

291 STRATEGIES FOR ACADEMIC SUCCESS
2 units, 2 lecture hours, (Pass/No Pass)
ADVISORY: Counselor placement.
Identification of learning strengths and weaknesses, educational, personal, career goals, study principles, methods and strategies to achieve them. Designed for students with disabilities.

292 LEARNING SKILLS AND STRATEGIES
2 units, 2 lecture hours, (Pass/No Pass)
ADVISORY: Counselor placement.
Development of college survival skills. Emphasis on time management, note-taking, test taking, library skills, improvement of communication skills, and career exploration. Designed for students with disabilities.

359 LEARNING ASSESSMENT
8 lab hours, (Pass/No Pass),
(Repeats = 4), (Open Entry/Open Exit),
(Formerly Developmental Services 59)
ADVISORY: Counselor placement.
Learning Assessment to identify learning strengths and deficits, and to provide information to DSP&S for verification of a disability and accommodations needed. Designed for students with disabilities.

DRAFTING (DRAFT)
SEE ALSO COMPUTER AIDED DRAFTING AND DESIGN

12 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)

25 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)

40 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)

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.

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)

50 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)

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)

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)
10 INTRODUCTION TO TEACHING WITH CLASSROOM FIELDWORK
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Introduction to the concepts and issues related to teaching diverse learners in 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. In addition to class time, the course requires a minimum of 45 hours of structured fieldwork in public K-12 classrooms that represent California's diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher. Students to complete their observation hours in a classroom that is in line with their degree plans. Multiple subject students to observe in an elementary school. Single subject majors (History, Math, English, etc.) to observe in a subject area at a high school or junior high school. (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 educational aide. Collaborative learning objectives established specific to educational aide. 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)

19X 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 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. (A, CSU)

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

50 INTRODUCTION TO ELECTRICAL SYSTEMS TECHNOLOGY
2 units, 2 lecture hours, (Formerly Electronic Technology 50)
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: Electrical Systems Technology 53.
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: Electrical Systems Technology 51.
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: Electrical Systems Technology 50.  
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: Electrical Systems Technology 52.  
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: Electrical Systems Technology 54.  
Introduction to digital systems and subcomponents. Introduction  
to analog vs. digital world, numbering systems, logic gates, decoders,  
encoders, multiplexer and multiplexed transmission, registers and mem-  
ory 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 56A.  
Facility automation fundamentals identifying various aspects of  
the control systems within a commercial building. (A, CSU)

55C SCADA SYSTEMS  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Electrical Systems Technology 56B.  
SCADA software and HMI hardware applications. (A, CSU)

56A WIRING METHODS  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Electrical Systems Technology 54.  
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 55A and 56A.  
Investigation and implementation of motor control. Emphasis on  
the fundamentals of logic and wiring as applied to motor controls. (A,  
CSU)

56C VARIABLE FREQUENCY DRIVES &  
MOTION CONTROL  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Electrical Systems Technology 56B and 58.  
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 55A.  
Analog modulation techniques and the frequency spectrum. (A,  
CSU)

57B DIGITAL COMMUNICATIONS  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Electrical Systems Technology 57A.  
Digital multiplexing, digital conversions, and network commu-  
nication. (A, CSU)

57C VOICE AND DATA CABELING  
3 units, 3 lecture hours, 1 lab hour  
ADVISORY: Electrical Systems Technology 54.  
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.  
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 56B.  
Basic instrumentation and control concepts with application in  
process control systems. Calibrating, terminology, and Piping and In-  
strument 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 51.  
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: Electrical Systems Technology 55A and 60.
Principles and structure of network addressing including applications and equipment operation. (A, CSU)

62 COMMERCIAL & INDUSTRIAL NETWORKING
3 units, 3 lecture hours, 1 lab hour
Applications of the architecture, components, protocols, routers, and switches used in commercial and industrial networking environments. (A, CSU)

80 INTRODUCTION TO PHOTOVOLTAICS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 54.
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.
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 51.
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.
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 end effector 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, (See also Welding Technology 83A)
ADVISORY: Electrical Systems Technology 55A.
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: Electrical Systems Technology 83A.
Advanced industrial robotics programming, integration, and collaborative applications. (A, CSU)

84A INTRODUCTION TO BIOMEDICAL ELECTRONICS
3 units, 3 lecture hours, 1 lab hour
ADVISORY: Electrical Systems Technology 59.
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 and 56A.
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 and 56A.
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 and 56A.
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 and 56A. Fundamentals of electrical safety as required by NFPA Document 70E. (A, CSU)

175 RESIDENTIAL WIRING
4 units, 3 lecture hours, 4 lab hours,
(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)
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)

175B RESIDENTIAL WIRING 2
4 units, 3 lecture hours, 3 lab hours, (See also Construction 175B)
ADVISORY: Eligibility for Applied Technology 130 or Mathematics 201 and eligibility for English 1A recommended.
Electrical Code. Hands on finish equipment installation, troubleshooting. Specialties 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)

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, 3 lecture hours, 3 lab hours,
(Formerly Engineering 26)
PREREQUISITE: Mathematics 4A. ADVISORY: English 1A.
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. (C-ID ENGR 140; ENGR 140B = ENGR 4 + 4L) (A, CSU, UC)
4L  ENGINEERING MATERIALS LABORATORY
1 unit, 3 lab hours
COREQUISITE: Engineering 4. ADVISORY: English 1A.
This course is the experimental exploration of the connections between the structure of materials and materials properties. Laboratories provide opportunities to directly observe the structures and behaviors discussed in the lecture course (ENGR 4), to operate testing equipment, to analyze experimental data, and to prepare reports. (C-ID ENGR 140L; ENGR 140B = ENGR 4 + 4L) (A, CSU, UC)

5  PROGRAMMING AND PROBLEM SOLVING IN MATLAB
3 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 or 17. ADVISORY: English 1A.
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, Thévenin'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, 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 3A or 4B. ADVISORY: English 1A.
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 168RW or placement for multiple measures.
This introductory course teaches the use of appropriate and effective language to explain and argue ideas. Major components include critical reading of diverse voices, writing as a process, writing strategies, and research. (C-ID ENGL 100) (A, CSU-GE, UC, I)
1AH HONORS READING AND COMPOSITION
4 units, 4 lecture hours, (Formerly Honors 1E)
PREREQUISITE: English 125 or English for Multi-Lingual Students 168RW or placement for multiple measures. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
This introductory course teaches the use of appropriate and effective language to explain and argue ideas. Major components include critical reading of diverse voices, writing as a process, writing strategies, and research. Honors sections may include more extensive research with a focus on academic journals, as well as critical thinking that includes in-depth analysis and synthesis of ideas. (C-ID ENGL 100) (A, CSU-GE, UC, I)

1B INTRODUCTION TO THE STUDY OF LITERATURE
3 units, 3 lecture hours
PREREQUISITE: English 1A.
Introduction of written works from major genres to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (C-ID ENGL 120) (A, CSU-GE, UC, I)

3 CRITICAL READING & WRITING
3 units, 3 lecture hours
PREREQUISITE: English 1A.
This course offers instruction in critical thinking skills in reading and writing, argumentation, research strategies, and analytical evaluation of primarily non-fiction texts. (C-ID ENGL 105) (A, CSU-GE, UC, I)

3H HONORS CRITICAL READING & WRITING
3 units, 3 lecture hours
PREREQUISITE: English 1A or 1AH. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.
This course offers instruction in critical thinking skills in reading and writing, argumentation, research strategies, and analytical evaluation of primarily non-fiction texts. Honors sections may cover additional subject matter, such as more in-depth analytical research and extensive analysis of rhetorical discourse. (C-ID ENGL 105) (A, CSU-GE, UC, I)

12 THE BIBLE AS LITERATURE
3 units, 3 lecture hours
PREREQUISITE: English 1A.
Survey of the Bible, Old and New Testaments, to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (A, CSU-GE, UC, I)

14 FOLKLORE
3 units, 3 lecture hours
PREREQUISITE: English 1A.
Survey of folklore in literature, film, and the visual arts from around the world to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities. (A, CSU-GE, UC, I)

15A CREATIVE WRITING: POETRY
3 units, 3 lecture hours, (Formerly English 15)
PREREQUISITE: English 1A.
Introduction to the craft of poetry through the study and analysis of the works of established and peer writers. Students will practice writing in various genres and will be introduced to the workshop method. (C-ID ENGL 200 = ENGL 15A + 15B) (A, CSU-GE, UC)

15B CREATIVE WRITING: FICTION
3 units, 3 lecture hours
PREREQUISITE: English 1A.
Introduction to the craft of fiction through the study and analysis of the works of established and peer writers. Students will practice writing in various fiction genres and will be introduced to the workshop method. (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.
Analysis and writing of plays for critical review. (A, CSU, UC)

15D CREATIVE WRITING: CREATIVE NONFICTION
3 units, 3 lecture hours
PREREQUISITE: English 1A.
Introduction to the craft of creative nonfiction including experimental nonfiction, literary journalism, memoir, essay, and other forms, through the study and analysis of the works of established and peer writers. Students will practice writing in various genres and will be introduced to the workshop method. (A, CSU, UC)

17 AFRICAN-AMERICAN LITERATURE
3 units, 3 lecture hours, (See also African-American Studies 17)
PREREQUISITE: English 1A.
This survey of classic and contemporary African-American literature aims to promote understanding and appreciation of the complex African-American experience through the development of close reading, analysis, and well-organized writing skills. (A, CSU-GE, UC, I)
20  ASIAN AMERICAN LITERATURE  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
Survey of written works from Asian American classic and contemporary literature. Develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (A, CSU, UC)

36  WOMEN’S LITERATURE  
3 units, 3 lecture hours, (See also Women’s Studies 36)  
PREREQUISITE: English 1A.  
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, to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (A, CSU-GE, UC, I)

40  THEMES IN LITERATURE  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
Survey of written works for themes, authors, or genres through close readings, contextual approaches, interpretations, critical evaluations, to promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. The topic of the course 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, etc. (A, CSU-GE, UC)

42  CLASSIC MYTHS  
3 units, 3 lecture hours, (See also Humanities 42)  
PREREQUISITE: English 1A.  
Introduction to basic mythic themes in literature, film, and the visual arts and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

44A  SURVEY OF WORLD LITERATURE TO THE MID-SEVENTEENTH CENTURY  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, the Americas, and other areas, from antiquity to the early to mid-seventeenth century. (C-ID ENGL 140) (A, CSU-GE, UC, I)

44B  SURVEY OF WORLD LITERATURE FROM MID-SEVENTEENTH CENTURY TO 1950  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, the Americas, and other areas, from the mid-seventeenth century period to 1950. (C-ID ENGL 145) (A, CSU-GE, UC, I)

45  CONTEMPORARY WORLD LITERATURE  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, the Americas, and other areas, since 1950. (A, CSU-GE, UC, I)

46A  ENGLISH LITERATURE TO 1800  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
Survey of British and Irish fiction, poetry, and drama from the earliest writings through 1800 to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (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.  
Survey of British and Irish fiction, poetry, and drama of the Romantic, Victorian, and Contemporary periods to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (C-ID ENGL 165) (A, CSU-GE, UC, I)

47  INTRODUCTION TO SHAKESPEARE  
3 units, 3 lecture hours  
PREREQUISITE: English 1A.  
An introduction to the plays and poetry of William Shakespeare. (A, CSU-GE, UC, I)
48A INTRODUCTION TO AMERICAN LITERATURE TO 1865
3 units, 3 lecture hours
PREREQUISITE: English 1A.
Survey of short stories, novels, poetry, essays, and plays from American writers through 1865 in order to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (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.
Survey of short stories, novels, poetry, essays, and plays from American writers from 1865 to the present in order to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (C-ID ENGL 135) (A, CSU-GE, UC, I)

105 GRAMMAR AND PUNCTUATION
3 units, 3 lecture hours, (Formerly English 5)
PREREQUISITE: None.
Elements of basic sentence structure, including appropriate punctuation. (A)

125 WRITING SKILLS FOR COLLEGE
4 units, 4 lecture hours, (Formerly English A and 25)
PREREQUISITE: English 252 or placement by multiple measures.
Develops the process of writing, revising and finishing short papers, including logical development and organization of ideas. Emphasizes avoiding common writing errors; develops critical thinking and writing by reading model essays and by analyzing and utilizing rhetorical strategies appropriate to purpose and audience. Develops basic research skills. Prepares students for English 1A. (A)

126A ACADEMIC READING EFFICIENCY
2 units, 2 lecture hours
PREREQUISITE: None.
Develops efficient academic reading and learning strategies which improve retention and application of learned content in college courses other than English. (A)

205 ACCELERATED READING AND COMPOSITION SKILLS
2 units, 2 lecture hours, (Pass/No Pass)
PREREQUISITE: Placement by multiple measures. COREQUISITE: English 1A.
Support course with concurrent enrollment in English 1A Reading and Composition. Emphasizes skills in critical reading, expository and argumentative writing, and research techniques. Includes intensive instruction and practice in reading, writing, and critical thinking skills for successful completion of ENGL 1A.

252 WRITING IMPROVEMENT
4 units, 4 lecture hours, (Pass/No Pass),
(Formerly English 52)
PREREQUISITE: None.
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.

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.

326A ACADEMIC READING EFFICIENCY
2 lecture hours, (Pass/No Pass),
(Retakes = 3)
PREREQUISITE: None.
Develops efficient academic reading and learning strategies which improve retention and application of learned content in college courses other than English.
ENGLISH FOR MULTI-LINGUAL STUDENTS (EMLS)
FORMERLY ENGLISH AS A SECOND LANGUAGE

168RW ADVANCED ACADEMIC READING AND WRITING
6 units, 6 lecture hours, (Formerly English for Multi-Lingual Students 180RW)
ADVISORY: Placement on Guided Student Self-Placement Assessment.

EMLS 168RW is an advanced, academic literacy course one level below transfer and is the final course in the EMLS academic reading and writing sequence. Emphasis is on refining the academic essay and developing a research essay based on authentic source material. Focus on advancing academic reading, vocabulary, grammar and critical thinking skills. Designed to prepare multilingual students for English 1A and content area courses. (A)

266LS INTERMEDIATE LISTENING AND SPEAKING
3 units, 3 lecture, (Pass/No Pass), (Formerly English for Multi-Lingual Students 264LS)
ADVISORY: Placement on Guided Student Self-Placement Assessment.

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.

266P PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION
3 units, 3 lecture hours, (Pass/No Pass), (Formerly English for Multi-Lingual Students 270)
ADVISORY: Placement on Guided Student Self-Placement Assessment.

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.

266RW INTERMEDIATE ACADEMIC READING AND WRITING
6 units, 6 lecture hours, (Pass/No Pass), (Formerly English for Multi-Lingual Students 284RW)
ADVISORY: Placement on Guided Student Self-Placement Assessment.

EMLS 266RW is a low-intermediate, academic literacy course three levels below transfer. It is the first course in the ELMS academic reading and writing sequence. Emphasis is on structuring the academic paragraph and developing short, academic essays in response to text-based prompts. Focus on developing academic reading, vocabulary, grammar and critical thinking skills. Designed to prepare multilingual students for EMLS 267RW.

267RW HIGH-INTERMEDIATE ACADEMIC READING AND WRITING
6 units, 6 lecture hours, (Pass/No Pass), (Formerly English for Multi-Lingual Students 285RW)
ADVISORY: Placement on Guided Student Self-Placement Assessment.

EMLS 267RW is a high-intermediate, academic literacy course two levels below transfer. It is the second course in the ELMS academic reading and writing sequence. Emphasis is on refining the academic paragraph and structuring the academic essay in response to text-based prompts. Focus on developing academic reading, vocabulary, grammar and critical thinking skills. Designed to prepare multilingual students for EMLS 168RW.

365G LOW-INTERMEDIATE ACADEMIC GRAMMAR
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 372A)
ADVISORY: Placement on Guided Student Self-Placement Assessment.

This non-credit grammar skills course is designed for speakers of other languages who want to comprehend and use grammar structures in written and oral academic English. This low-intermediate course may be taken concurrently with other EMLS courses.
365LS LOW-INTERMEDIATE LISTENING AND SPEAKING
1 lecture hour, (Pass/No Pass),
(Repeats = 3), (Formerly English for Multi-Lingual Students 373A)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
A non-credit listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the low-intermediate level. This course can be taken concurrently with other English for multi-lingual courses.

365P LOW-INTERMEDIATE PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 371A)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
This non-credit course is for EMLS students at the low-intermediate level to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.

366LS INTERMEDIATE LISTENING AND SPEAKING
3 lecture hours, (Repeats = 3),
(Pass/No Pass), (Formerly English for Multi-Lingual Students 364LS)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
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.

366P PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION
3 lecture hours, (Pass/No Pass),
(Repeats = 3), (Formerly English for Multi-Lingual Students 370)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
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.

366RW INTERMEDIATE ACADEMIC READING AND WRITING
6 lecture hours, (Pass/No Pass),
(Repeats = 3), (Formerly English for Multi-Lingual Students 384RW)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
EMLS 366RW is a non-credit low-intermediate, academic literacy course three levels below transfer. It is the first course in the ELMS academic reading and writing sequence. Emphasis is on structuring the academic paragraph and developing short, academic essays in response to text-based prompts. Focus on developing academic reading, vocabulary, grammar and critical thinking skills. Designed to prepare multilingual students for EMLS 367RW.

367G HIGH-INTERMEDIATE ACADEMIC GRAMMAR
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 372B)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
This non-credit grammar skills course is designed for speakers of other languages who want to comprehend and use grammar structures in written and oral academic English. This high-intermediate course may be taken concurrently with other EMLS courses.

367LS HIGH-INTERMEDIATE LISTENING AND SPEAKING
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 373B)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
A non-credit listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the high-intermediate level. This course can be taken concurrently with other English for Multi-Lingual Students courses.

367P HIGH-INTERMEDIATE PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 371B)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
This non-credit course is for EMLS students at the High Intermediate level to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.
367RW HIGH INTERMEDIATE ACADEMIC READING AND WRITING
6 lecture hours, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 385RW)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
EMLS 367RW is a non-credit high-intermediate, academic literacy course two levels below transfer. It is the second course in the ELMS academic reading and writing sequence. Emphasis is on refining the academic paragraph and structuring the academic essay in response to text-based prompts. Focus on developing academic reading, vocabulary, grammar and critical thinking skills. Designed to prepare multilingual students for EMLS 168RW.

368G ADVANCED ACADEMIC GRAMMAR
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 372C)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
This non-credit grammar skills course is designed for speakers of other languages who want to comprehend and use grammar structures in written and oral academic English. This advanced course may be taken concurrently with other EMLS courses offered.

368LS ADVANCED LISTENING AND SPEAKING
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 373C)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
A non-credit listening and speaking course designed for multi-lingual speakers who wish to develop their oral language skills at the advanced level. This course can be taken concurrently with other English for multi-lingual courses.

368P ADVANCED PRONUNCIATION IMPROVEMENT AND ACCENT REDUCTION
1 lecture hour, (Pass/No Pass), (Repeats = 3), (Formerly English for Multi-Lingual Students 371C)
ADVISORY: Placement on Guided Student Self-Placement Assessment.
This non-credit course is for EMLS students at the Advanced level to improve oral communication (listening/speaking) skills including phonetic accuracy and fluency. Improving oral communication skills results in greater speaker confidence and intelligibility.

ETHNIC STUDIES (ETHNST)

10 INTRODUCTION TO ETHNIC STUDIES
3 units, 3 lecture hours, (Formerly American Studies 10)
ADVISORY: Eligibility for English 1A recommended.
Interdisciplinary examination of race, ethnicity, racism, and racial and ethnic identity in U.S. society. Introduction to key concepts in Comparative Ethnic Studies, such as how race and racism intersect with gender, sexuality, religion, national origin, ability, immigration status, language, tribal membership, etc. Emphasis on comparative analysis and exploration of the intertwined histories of racial and ethnic groups within the U.S., institutional racism, resistance against racism, solidarity across racial and ethnic lines, and social and racial justice movements. (C-ID SJS 110) (A, CSU-GE; UC, I)

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. ADVISORY: English 1A.
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: English 1A.
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 appropriates for end use. This course qualifies for various Fashion Vocational Certificates. (A, CSU)
27 INTRODUCTION TO FASHION MERCHANDISING
3 units, 3 lecture hours, (See also Marketing 22)
ADVISORY: English 1A.
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)

FILM (FILM)

1 INTRODUCTION TO FILM STUDIES
3 units, 3 lecture hours
ADVISORY: English 1A.
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: English 1A.
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: English 1A.
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: English 1A.
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
PREREQUISITE: None.
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: English 1A.
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: English 1A.
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)
PREREQUISITE: None.
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)
PREREQUISITE: None.
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)
   PREREQUISITE: None.
   Features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. (C-ID FIRE 120X) (A, CSU)

4  BUILDING CONSTRUCTION FOR FIRE PROTECTION
   3 units, 3.27 lecture hours, (Spring), (Formerly Fire Science 5)
   PREREQUISITE: None.
   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)
   PREREQUISITE: None.
   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)
   PREREQUISITE: None.
   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)
   PREREQUISITE: None.
   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)
   PREREQUISITE: None.
   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)

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 fire technology. 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)

22A FIREFIGHTER II PART A
   2 units, 1.87 lecture hours, 0.47 lab hour, (Formerly Fire Technology 222A)
   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. (A, CSU)
22B  FIREFIGHTER II PART B
3 units, 2.7 lecture hours, 1.79 lab hours,
(Formerly Fire Technology 222B)
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 firefighter 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. (A, CSU)

23  COMPANY OFFICER 2A: HUMAN
RESOURCE MANAGEMENT FOR
COMPANY OFFICERS
2 units, 2.34 lecture hours, (Formerly Fire
Technology 223)
PREREQUISITE: None.
Topics include the use of human resources to accomplish as-
signments, evaluating member performance, supervising personnel, and
integrating health and safety plans, policies, and procedures into daily
activities as well as the emergency scene. Must meet state fire training
prerequisites. (A, CSU)

24  COMPANY OFFICER 2B: GENERAL
ADMINISTRATIVE FUNCTIONS FOR
COMPANY OFFICERS
1 unit, 1.12 lecture hours, (Formerly Fire
Technology 224)
PREREQUISITE: None.
Topics include general administrative functions and the im-
plementation of department policies and procedures and addresses
conveying the fire department's role, image, and mission to the public.
Must meet state fire training prerequisites. (A, CSU)

25  COMPANY OFFICER 2C: FIRE INSPECTIONS
AND INVESTIGATIONS FOR COMPANY
OFFICERS
2 units, 2.23 lecture hours, (Formerly Fire
Technology 225)
PREREQUISITE: None.
Topics include conducting inspections, identifying hazards
and addressing violations, performing a fire investigation to determine
preliminary cause and securing the incident scene and preserving
evidence. Must meet state fire training prerequisites. (A, CSU)

26  COMPANY OFFICER 2D: ALL-RISK
COMMAND OPERATIONS FOR COMPANY
OFFICERS
2 units, 2.23 lecture hours, (Formerly Fire
Technology 226)
PREREQUISITE: None.
Topics include 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. Must meet
state fire training prerequisites. (A, CSU)

27  COMPANY OFFICER 2E: WILDLAND
INCIDENT OPERATIONS FOR COMPANY
OFFICERS
2 units, 2.23 lecture hours, (Formerly Fire
Technology 227)
PREREQUISITE: None.
Topics include 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. Must meet state fire training prerequisites. (A, CSU)

29  INTERMEDIATE WILDLAND FIRE BEHAVIOR
2 units, 2.25 lecture hours
PREREQUISITE: None.
Topics include preparing 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. Fire environment differences are discussed as
necessary, and the instructor should stress local conditions. Must meet
state fire training prerequisites. (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 Com-
mander (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)  
PREREQUISITE: None.  
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)

51A BASIC FIRE INVESTIGATIONS  
1.5 units, 1.5 lecture hours, 0.7 lab hour  
PREREQUISITE: None.  
Topics include information on securing the fire scene and determining the origin and cause of the fire. Topics include responsibilities of a fire investigator, securing the fire ground, conducting an exterior and interior survey, analyzing fire patterns, interpreting individual fire patterns, discriminating the effects of explosions, examining and removing fire debris, reconstructing the area of origin, inspecting the performance of building systems. Must meet state fire training course prerequisites. (A, CSU)

51B EVIDENCE AND DOCUMENTATION  
1 unit, 1.17 lecture hours, 0.7 lab hour  
PREREQUISITE: None.  
Topics include information on scene documentation and evidence collection/preservation. Topics include photographing the scene, diagramming the scene, constructing investigative notes, processing evidence and establishing chain of custody, processing victims and fatalities, selecting evidence for analysis, maintaining a chain of custody, preparing a fire investigation report, and disposing of evidence. Must meet state fire training course prerequisites. (A, CSU)

51C PREPARATION FOR LEGAL PROCEEDINGS  
1 unit, 1 lecture hour, 1.23 lab hours  
PREREQUISITE: None.  
Topics include information on legal considerations for a court proceeding. Topics include coordinating expert resources, formulating an opinion, presenting investigative findings, and testifying during legal proceedings. You must meet state fire training course prerequisites. (A, CSU)

51D WILDLAND FIRE ORIGIN AND CAUSE DETERMINATION  
1 unit, 1 lecture hour, 1.23 lab hours  
PREREQUISITE: None.  
This course is to provide a consistent knowledge and skill base for the Wildland Fire Investigator (INVF). The concepts taught in this course will help an INVF perform at an acceptable level on a national basis without regard to geographic boundaries. The course is presented by lectures, electronic presentations, field exercises, and class discussion. (A, CSU)

130A BASIC FIRE ACADEMY - PART 1  
14.5 units, 8 lecture hours, 20 lab hours  
PREREQUISITE: Valid Public Safety First Aid and CPR course as defined by California Health & Safety Code, Section 1797.162. 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  
14.5 units, 8.42 lecture hours, 19.5 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).  
Topics include skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. 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)
Fire Technology

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.

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
21.5 units, 12.5 lecture hours, 11.5 lab hours, (24 weeks)
PREREQUISITE: None.
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)

136 EMERGENCY MEDICAL TECHNICIAN – PARAMEDIC CLINICAL AND FIELD WORK
13 units, 1.5 lecture hours, 43.8 lab hours, (15 weeks)
PREREQUISITE: None.
The student will rotate through two required settings. The hospital, which consists of rotations in various departments including: emergency, surgery, labor & delivery and pediatrics, specialty units and Advanced Cardiac Life Support (ACLS), certification. The field, responding with assigned paramedic preceptors, the students will assess the scene, patients and provide appropriate care. The rotations are required 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)

150N INSTRUCTOR II INSTRUCTIONAL DEVELOPMENT
2 units, 8.4 lecture hours, (5 weeks)
PREREQUISITE: None.
Topics include intermediate level professional instructor to perform his or her duties safely, effectively, and competently. 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: None.
Topics include 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. Must meet state fire training prerequisites. (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)

160C RESCUE SYSTEMS 2
0.5 unit, 0.22 lecture hour, 2.01 lab hours, (Pass/No Pass)
PREREQUISITE: None.
Provides advanced heavy rescue system techniques. Key topics include: Structural building types, wood and mechanical shores, crib capacities, floor weight calculations, building search, confined space considerations, damaged structure hazard assessment, use of power tools, air bags, and USAR ICS. Must meet State fire training course prerequisites. (A)
160D RESCUE SYSTEMS 3
0.5 unit, 0.22 lecture hour, 2.01 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
Bridges the training gap between the California State Fire Training Rescue Systems 2 Advanced Rescue Skills course and the Federal Emergency Management Agency Structural Collapse Technician course. Key topics include: powder actuated tools, pneumatic shores, additional tools and techniques for breaking and breaching, cutting a tensioned cable, the "O" course, rigging, and crane operations. Must meet State fire training course prerequisites. (A)

160E OPEN WATER RESCUE
0.5 unit, 0.44 lecture hour, 0.9 lab hour,
(Pass/No Pass)
PREREQUISITE: None.
Topics include improving an individual’s level of comfort and confidence for safely and proficiently performing contact rescues in static and surf water conditions. Safety is strongly emphasized throughout the class. Risk management is reinforced during every skill to establish your level of comfort in the water and to identify and overcome your limitations. The emphasis on risk management helps you determine if your actions meet your agencies SOPS/SOGS in the determination of a rescue being a “offensive” or “defensive” operation. Swimming, stroke technique and body positioning in the water are covered. “In water” skills for students include how to read and understand water flow, reading and understanding surf, contact rescues using rescue buoy devices and boards, dealing with combatant victims, performing self-rescues, and rescues of multiple victims both conscious and unconscious. Must meet State fire training course prerequisites. (A)

160F PERSONAL WATERCRAFT RESCUE OPERATIONS
0.5 unit, 0.33 lecture hour, 0.56 lab hour,
(Pass/No Pass)
PREREQUISITE: None.
Recognize regulations governing the operation of personal watercraft on all waterways. Demonstrate a working knowledge of personal watercraft safety. Identify the procedure of report filing for any personal watercraft incident. Understand the operations of a personal watercraft jet drive system. Must meet State fire training course prerequisites. (A)

160G RAPID INTERVENTION CREW (RIC) OPERATIONS
0.4 unit, 0.11 lecture hour, 1.01 lab hour,
(Pass/No Pass)
PREREQUISITE: None.
Topics include rescuing a downed firefighter in an immediately dangerous to life and health (IDLH) environment in the continuing effort to reduce the number of firefighter injuries and deaths that occur regularly. Tragedies suffered by fellow firefighters from departments across the country are the basis for the training evolutions and scenarios. We will show you how to use these LODD studies as training and prevention tools throughout your career. Recognize regulations governing the operation of personal watercraft on all waterways. Demonstrate a working knowledge of personal watercraft safety. Identify the procedure of report filing for any personal watercraft incident. Must meet State fire training course prerequisites. (A)

160H RESCUE BOAT OPERATIONS
0.5 unit, 0.45 lecture hour, 0.89 lab hour,
(Pass/No Pass)
PREREQUISITE: None.
Introduce emergency service personnel to the codes and regulations that impact rescue boat operations. Provide emergency service personnel with a thorough knowledge of rescue boat operations. Prepare emergency service personnel for maintaining and performing inspections on rescue boats. Must meet State fire training course prerequisites. (A)

160I ROPE RESCUE TECHNICIAN
0.5 unit, 0.22 lecture hour, 2.01 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
Students will undergo competency testing for high angle rescue. The scope of the program is to familiarize participants with the high angle environment and experience; and for them to safely participate in the engineering and operation of simple to complex rescue systems. Must meet State fire training course prerequisites. (A)
160J **TRENCH RESCUE TECHNICIAN**
0.4 unit, 0.24 lecture hour, 0.62 lab hour,
(Pass/No Pass)
PREREQUISITE: None.
Topics include working safely and efficiently in a trench rescue environment. This hands-on training program will cover topics that include: Trench and Excavation Regulations, Understanding Soil, Trench Configurations, Trench Hazards, Rescue Team Preparation, Incident Response, Initial On Scene and Pre-Entry Operations, Shoring Systems and Components, Installation of Shoring Systems, Victim Rescue and Recovery and Incident Termination. Must meet State fire training course prerequisites. (A)

160K **ROPE RESCUE OPERATIONS**
1 unit, 1 lecture hour, 1.23 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
This course provides information on low-angle and high-angle rescue, familiarizing participants with operation of simple, complex, and compound rope rescue systems in the low- and high-angle environment. (A)

230A **FIRE APPARATUS DRIVER OPERATOR 1A**
1 unit, 0.88 lecture hour, 1.35 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
Topics include 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. Must meet state fire training prerequisites.

230B **FIRE APPARATUS DRIVER OPERATOR 1B**
1 unit, 0.89 lecture hour, 1.34 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
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. Must meet state fire training prerequisites.

230C **FIRE APPARATUS DRIVER/OPERATOR - AERIAL APPARATUS**
1.5 units, 1.13 lecture hours, 1.1 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
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. Must meet state fire training prerequisites.

230D **FIRE APPARATUS DRIVER/OPERATOR – WATER TENDER**
0.5 unit, 0.36 lecture hour, 1.42 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
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. Must meet state fire training prerequisites.

230E **FIRE APPARATUS DRIVER/OPERATOR – WILDLAND FIRE APPARATUS**
0.5 unit, 0.25 lecture hour, 1.09 lab hours,
(Pass/No Pass)
PREREQUISITE: None.
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. Must meet State Fire Training prerequisites.
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 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.

260A CHIEF FIRE OFFICER 3A
1 unit, 0.85 lecture hour, 0.6 lab hour, (Pass/No Pass)
PREREQUISITE: None.
Topics include 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. Must meet state fire training prerequisites.

260B CHIEF FIRE OFFICER 3B
0.5 unit, 0.5 lecture hour, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: None.
Topics include 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. Must meet state fire training prerequisites.

260C CHIEF FIRE OFFICER 3C
1 unit, 0.84 lecture hour, 0.5 lab hour, (Pass/No Pass)
PREREQUISITE: None.
Topics include 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. Must meet state fire training prerequisites.

260D CHIEF FIRE OFFICER 3D
0.5 unit, 0.82 lecture hour, 0.52 lab hour, (Pass/No Pass)
PREREQUISITE: None.
Topics include 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. Must meet state fire training prerequisites.
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: None.
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. Must meet state fire training prerequisites.

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 ingredient 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 dictate 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 fitness 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.
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; therapeutic 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)

7 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)

8 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)

21 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)

22 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)

ARMENIAN (ARMEN)

1 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)

2 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)

CHINESE (CHIN)

1 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)
2 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)

FRENCH (FRENCH)

1 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, reading, writing, 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)

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: English 1A.
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 Spanish 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 GEOPHYSICS 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)

9 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)
ENVIRONMENTAL SCIENCE
3 units, 3 lecture hours, (Formerly Environmental Studies 7)
ADVISORY: Knowledge of basic algebra. Eligibility for English 1A 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)

WEB DESIGN
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: None.
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. (A, CSU, UC)

ADOBE ILLUSTRATOR
3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 17)
PREREQUISITE: None.
Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction. (A, CSU)

INTRO TO APPLIED GRAPHICS – ADOBE TOOLS
3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 20 and Printing Technology 20)
PREREQUISITE: None.
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. (A, CSU)

ADOBE ILLUSTRATOR
3 units, 2 lecture hours, 3 lab hours, (Formerly Printing Technology 17)
PREREQUISITE: None.
Use Adobe Illustrator to design and create vector images that solve a variety of graphic problems. Hands-on work creating projects for reproduction. (A, CSU)

INTRO TO APPLIED GRAPHICS - MEDIA
3 units, 2 lecture hours, 3 lab hours, (Formerly Graphic Communications 18)
PREREQUISITE: None.
Introductory production methods of graphic communication systems incorporating print media, web design, video production, and prototyping. Project work explores considerations and limitations of software for output. Units include professional development for the workplace. (A, CSU)
22 DIGITAL MEDIA
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None
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. (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.
Digital video editing techniques using Adobe Premiere Pro. (A, CSU)

24A INTRO 2-D ANIMATION WITH ADOBE ANIMATE
3 units, 2 lecture hours, 3 lab hours,
(Formerly Graphic Communications 24)
PREREQUISITE: None
Use Adobe Animate to author two-dimensional animation. Design and production of interactive media projects. (A, CSU, UC)

27 DIGITAL VIDEO PRODUCTION
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
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. (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, 20A, 22, 27 or 30.
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. (A, CSU)

30 ADOBE INDESIGN/PROFESSIONAL PUBLISHING
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology 30)
PREREQUISITE: None.

31 INTERMEDIATE PHOTOSHOP
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications. (A, CSU, UC)

32 CINEMATOGRAPHY
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Production processes and post-production processes with a focus on technical aspects. Lighting, audio, camera work, and color correction. (A, CSU, UC)

34 INTRODUCTION TO 3-D ANIMATION
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Introduction to 3-D animation using Blender software. Projects dealing with workflow, interface, layouts, objects, lighting, animation, and rendering. (A, CSU, UC)

38 VIDEO POST PRODUCTION
2 units, 2 lecture hours
ADVISORY: Graphic Communications 23 or 323.
Post-Production techniques for adjusting audio and video project quality. (A, CSU)

39A INTRODUCTION TO GRAPHIC DESIGN
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology 39 and Graphic Communications 39)
COREQUISITE: Graphic Communications 20A or 320A.
Principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between formal elements and symbolic content. (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.
Advanced principles and methods of graphic communication. Projects incorporate symbols and typography into visual design, exploring interrelationships between the formal elements and symbolic content. (A, CSU, UC)
41 VISUAL COMMUNICATIONS
3 units, 2 lecture hours, 3 lab hours,
(Formerly Printing Technology 41)
PREREQUISITE: None.
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. (A, CSU, UC)

47 INTRODUCTION TO MEDIA APPRECIATION
3 units, 3 lecture hours
PREREQUISITE: None.
Fundamental principles and foundational competencies for digital artists and designers. (A, CSU, UC)

51 STORYBOARDING
1 unit, 2 lecture hours, (9 weeks)
PREREQUISITE: None.
Pre-visualization for animation, video, web, and game production. Introduction to media-specific storyboarding processes and techniques. (A, CSU)

53 ADOBE AFTER EFFECTS
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Introduction to motion graphics and video post-processing using Adobe After Effects. Projects incorporate a series of techniques used to create video special effects. (A, CSU)

55 SOCIAL MEDIA DESIGN
2 units, 2 lecture hours, 1 lab hour
PREREQUISITE: None.
Graphic design principles and processes directly related to current social media platforms and interactions. (A, CSU)

300A ADOBE ACA CERTIFICATION
0.5-3 lab hours, (Pass/No Pass), (Open Entry/Open Exit), (Repeats = 99)
PREREQUISITE: None.
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.

315 WEB DESIGN
3 lecture hours, 3 lab hours, (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
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.

317 ADOBE ILLUSTRATOR
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
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),
(Repeats = 99)
PREREQUISITE: None.
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),
(Repeats = 99)
PREREQUISITE: None.
Introductory production methods of graphic communication systems incorporating print media, web design, video production, and prototyping. 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),
(Repeats = 99)
PREREQUISITE: None.
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),
(Repeats = 99)
ADVISORY: Graphic Communications 27, 32, 320B, 327, or 332.
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),
(Repeats = 99)
PREREQUISITE: None.
Use Adobe Animate to author two-dimensional animation. Design and production of interactive media projects.

327 DIGITAL VIDEO PRODUCTION
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
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),
(Repeats = 99)
PREREQUISITE: None.

331 INTERMEDIATE PHOTOSHOP
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
Adobe Photoshop with emphasis on graphic design and production. Units include production for print, web, and digital media applications.

332 CINEMATOGRAPHY
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
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),
(Repeats = 99)
PREREQUISITE: None.
Introduction to 3-D animation using Blender software. Projects dealing with workflow, interface, layouts, objects, lighting, animation, and rendering.

338 VIDEO POST PRODUCTION
2 lecture hours, (Pass/No Pass),
(Repeats = 99)
ADVISORY: Graphic Communications 23 or 323.
Post-Production techniques for adjusting audio and video project quality.

339A INTRODUCTION TO GRAPHIC DESIGN
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Repeats = 99)
COREQUISITE: Graphic Communications 20A or 320A.
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),
(Repeats = 99)
PREREQUISITE: Graphic Communications 39A.
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),
(Repeats = 99)
PREREQUISITE: None.
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 MEDIA APPRECIATION
3 lecture hours, (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
Fundamental principles and foundational competencies for digital artists and designers.
351 STORYBOARDING
2 lecture hours, (9 weeks), (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
Pre-visualization for animation, video, web, and game production.
Introduction to media-specific storyboarding processes and techniques.

353 ADOBE AFTER EFFECTS
2 lecture hours, 3 lab hours, (Pass/No Pass),
(Repeats = 99)
PREREQUISITE: None.
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 health information systems; accreditation, licensure, and regulatory requirements; the role of the health information management professional. (C-ID HIT 100X) (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. (C-ID HIT 102X) (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 5 or 55. ADVISORY: 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. (C-ID HIT 105X) (A, CSU)

5 ICD CODING: DIAGNOSES
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 1 and 10. COREQUISITE: Health Information Technology 4. ADVISORY: Eligibility for English 1A recommended.
Medical coding of diagnoses using the International Classification of Diseases (ICD); overview of nomenclatures and classification systems; coding rules, principles, guidelines, and conventions; state and federal regulations impacting coding; documentation to support coding. Introduction to coding software applications. (A, CSU)

6 ICD CODING: PROCEDURES
3 units, 3 lecture hours
PREREQUISITE: Health Information Technology 1 and 5. ADVISORY: Eligibility for English 1A recommended.
Medical coding of procedures using the International Classification of Diseases - Procedure Coding System; coding rules, principles, guidelines, and conventions; regulations impacting coding; documentation to support coding. Use of coding software applications. (A, CSU)

7 DIRECTED PRACTICE
3 units, 1 lecture hour, 6 lab hours
PREREQUISITE: Health Information Technology 2, 3, 5, 6, and 14. COREQUISITE: Health Information Technology 8 and 16. 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 with virtual laboratory skills practice. (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, cultural diversity, and ethics. (C-ID HIT 210X) (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 English 1A recommended. Math 11 or equivalent 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. (C-ID HIT 206X) (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. (C-ID HIT 103X) (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. (C-ID HIT 104X) (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. (C-ID HIT 208X) (A, CSU)

15 MEDICAL CODING DIRECTED PRACTICE
1 unit, 3 lab hours, (Pass/No Pass)
PREREQUISITE: Health Information Technology 5 and 6. COREQUISITE: Health Information Technology 11. ADVISORY: Eligibility for English 1A recommended.
Supervised practice of diagnostic and procedure coding; demonstration of knowledge in regulatory compliance, revenue cycle, and reimbursement methodologies. Practice with AHIMA Virtual Lab encoding and revenue cycle applications. (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. (C-ID PHS 100) (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 for American Red Cross or American Heart Association certification in Adult, Child and Infant Cardiopulmonary Resuscitation (CPR) 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

51 ELECTRICITY FOR HVAC
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 51)
In Electricity for HVAC, students focus on electrical components and controls that comprise an HVAC system. Students build an inventory of HVAC electrical skill sets. Students learn the theory and application of HVAC technology and learn electrical measurement techniques in the laboratory. (A, CSU)

52 HEATING SYSTEMS
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 52)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 54, Applied Technology 10 and 130.
In Heating Systems, students examine various heating technologies and differentiate between furnace types using component inspection methods. Fuel gas properties are explored and matched to appropriate ignition systems. Furnace venting requirements are described. Students assemble an inventory of practical skill sets including combustible gas and refrigerant leak detection methods, charting and electrical diagramming. Heat pump technology is examined with emphasis on the special design features. (A, CSU)

53 SYSTEM ANALYSIS AND REGULATIONS
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 53)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 51, Applied Technology 10 and 130.
In HVAC System Analysis and Regulation, students evaluate operating HVAC systems while earning EPA Section 608 refrigerant handling certification. (A, CSU)

54 BRAZING AND MOTOR TECHNOLOGY
6.5 units, 5 lecture hours, 5 lab hours,
(Formerly Air Conditioning 54)
ADVISORY: Heating, Ventilation, and Air Conditioning 50 and 52, Applied Technology 10 and 130.
Students describe the uses of electric motors in the HVAC trade, identify the parts of electric motors, identify distinguishing features of the standard motor types, calculate operational speeds, and identify horsepower requirements. Students draw motor circuit diagrams and troubleshoot common motor faults. Students describe the function of an air-side economizer, braze copper connections, and evacuate a refrigerant circuit to specified micron levels. (A, CSU)
350 RETA/CARO READY – EPA SECTION 608 TECHNICIAN CERTIFICATION
3 lecture hours, (Open Entry/Open Exit)
ADVISORY: Applied Technology 10 and 130, and Heating, Ventilation, and Air Conditioning 53.
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 HVACR 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 130, and Heating, Ventilation, and Air Conditioning 53.
This course prepares HVAC students and incumbent workers 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)

2 WESTERN CIVILIZATION SINCE 1648
3 units, 3 lecture hours
ADVISORY: English 1A.
Social, economic, political, military, and cultural history of European civilizations, and their relationship with the world, from the 17th century to the present. (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 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, (See also Women’s Studies 22)
   ADVISORY: English 1A.
   Social, political, cultural, and economic history of women in American society; employment, domesticity, feminism, struggles for equal rights; 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 Spanish colonization to the present, emphasizing the period since statehood. (A, CSU-GE, UC, I)

34  HISTORY 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. 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. 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)

COMMUNICATION 8H, HONORS GROUP COMMUNICATION
3 units, 3 lecture hours
ADVISORY: English 1A. Meet the qualifications for consideration for acceptance in the Honors Program recommended. See Honors Program listing in the college catalog.
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-GE, UC, I)

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: English 125 or English for Multi-Lingual Students 168RW or placement by multiple measures. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

This introductory course teaches the use of appropriate and effective language to explain and argue ideas. Major components include critical reading of diverse voices, writing as a process, writing strategies, and research. Honors sections may include more extensive research with a focus on academic journals, as well as critical thinking that includes in-depth analysis and synthesis of ideas. (C-ID ENGL 100) (A, CSU-GE, UC, I)

ENGLISH 3H, HONORS CRITICAL READING & WRITING
3 units, 3 lecture hours
PREREQUISITE: English 1A or 1AH. ADVISORY: Meet the qualifications for consideration for acceptance into the Honors Program recommended. See Honors Program listing in the college catalog.

This course offers instruction in critical thinking skills in reading and writing, argumentation, research strategies, and analytical evaluation of primarily non-fiction texts. Honors sections may cover additional subject matter, such as more in-depth analytical research and extensive analysis of rhetorical discourse. (C-ID ENGL 105) (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, 2 lecture hours, (9 weeks)
ADVISORY: Meet the qualifications for acceptance into the Honors Program. 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 the biological sciences. (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, 2 lecture hours, (9 weeks)
ADVISORY: Meet the qualifications for acceptance into the Honors Program. 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, film and philosophy. (A, CSU, UC)

HONORS 1D, HONORS BUSINESS, ECONOMICS AND ACCOUNTING COLLOQUIUM: THE LOCAL ECONOMY AND AGRIBUSINESS
1 unit, 1 lecture hour
ADVISORY: Meet the qualifications for acceptance into the Honors Program. 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, UC)
HONORS 1E, HONORS SOCIAL SCIENCE
COLLOQUIUM: CONTEMPORARY ISSUES
IN SOCIAL SCIENCE
1 unit, 1 lecture hour
ADVISORY: Meet the qualifications for acceptance into the Honors Program. 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, UC)

HONORS 1F, HONORS PHI THETA KAPPA
COLLOQUIUM: PHI THETA KAPPA STUDY TOPICS
1 unit, 1 lecture hour
ADVISORY: 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)

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 or placement by multiple measures. ADVISORY: Meet the qualifications for consideration into the Honors Program recommended. See Honors Program listing in the college catalog.
Topics include 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. (C-ID MATH 110) (A, CSU-GE, UC, I)

PHILOSOPHY 1AH, HONORS THEORIES OF KNOWLEDGE AND REALITY
3 units, 3 lecture hours, (Formerly Honors 1P)
COREQUISITE: 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 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
COREQUISITE: 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 and analytic writing, emphasizing deductive logic (including formal techniques of sentential logic) thesis-driven argumentation, and research strategies. Includes the identification of arguments, developing and assessing basic deductive and inductive written arguments, common fallacies, and application of each element to various areas of study and real-world situations. (C-ID ENGL 105) (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 of psychology, research methods, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, mental illness and therapy, stress and health, social psychology, and the social and cultural influences that affect behavior. 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: English 1A. 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, interpersonal/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 readings. (C-ID SOC 110) (A, CSU-GE, UC, I)

HUMAN SERVICES (HS)

10 INTRODUCTION TO AGING STUDIES
3 units, 3 lecture hours, (See also Sociology 10)
ADVISORY: English 1A.

Overview of social, economic, biological, and psychological aspects of aging. Exploration of challenges and strengths of the aging people with emphasis on consumerism, housing, health, leisure time, family roles, retirement, widowhood and sexuality. (A, CSU-GE, UC, I)

11 ELDER CARE HUMAN SERVICES
3 units, 3 lecture hours
COREQUISITE: Human Services 10. ADVISORY: English 1A.

Instruction for the provision of human services to elders and their support systems. Emphasis on the application of social work theories and perspectives and integrative service provision for strengths based, empowerment client outcomes. (A, CSU)

18 ALCOHOL AND DRUG ABUSE COUNSELING: PROFESSIONAL AND PERSONAL GROWTH
2 units, 2 lecture hours
ADVISORY: English 1A.

Provides techniques to establish optimal performance and the well-being of the Alcohol and Drug Abuse helping professional. (A, CSU)
19A WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
PREREQUISITE: Human Services 20. COREQUISITE: Human Services 24. 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: English 1A.
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)

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: English 1A.
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: English 1A.
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: English 1A.
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: English 1A.
Methods of human services and social work intervention through organizational, community, and social policy change action, including analysis of challenges and strengths for client empowerment. (A, CSU)

40 ALCOHOL AND DRUG ABUSE COUNSELING: LAW AND ETHICS, PREVENTION, EDUCATION, OUTREACH AND REFERRAL
3 units, 3 lecture hours
ADVISORY: English 1A.
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: English 1A.
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: English 1A.
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: English 1A.
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: English 1A.
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)

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 the human civilization from the seventeenth century to the present. (A, CSU-GE, UC, I)

42 CLASSICAL MYTHS
3 units, 3 lecture hours, (See also English 42)
PREREQUISITE: English 1A.
Introduction to basic mythic themes in literature, film, and the visual arts and their ultimate form and continued presence in the arts. (A, CSU-GE, UC, I)

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 necessary 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 employment in warehouse environment. Warehouse inventory and processing procedures utilizing computer based related programs, mathematics and proper packaging techniques to industry standards.

INFORMATION SYSTEMS
SEE COMPUTER INFORMATION TECHNOLOGY (CIT)

JAPANESE
SEE FOREIGN LANGUAGE

JOURNALISM (JOURN)

1 INTRODUCTION TO MASS COMMUNICATION
3 units, 3 lecture hours
ADVISORY: English 1A.
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)
3 NEWSWRITING
3 units, 2 lecture hours, 3 lab hours
ADVISORY: English 1A.
News information gathering and writing for print and digital media. Includes the basics of news writing, methods and practices, interviewing, feature writing, and emphasis on writing against deadlines. Covers the ethical, policy and legal questions confronting journalists, their editors and publishers. (C-ID JOUR 110) (A, CSU)

11A BEGINNING MEDIA WRITING PRACTICUM
3 units, 2 lecture hours, 3 lab hours
ADVISORY: Journalism 3.
Students practice and refine beginning news gathering, reporting and writing skills by working as staff members of the college's student-run newspaper. 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 news gathering, reporting and writing skills by working as staff members of the college's student-run newspaper. 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 news gathering, reporting and writing skills by working as staff members of the college newspaper. 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.
Providing leadership to the college's student-run newspaper. Focus is on managing student reporters as they gather information and create content. (C-ID JOUR 130 and JOUR 131) (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)

16 RACE, GENDER AND THE MEDIA
3 units, 3 lecture hours
ADVISORY: English 1A.
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 minoritized communities. (A, CSU-GE, UC, I)

19 WORK EXPERIENCE (COOPERATIVE), OCCUPATIONAL
1-8 units
COREQUISITE: Journalism 11A 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 journalism field.
Supervised employment in a news or strategic communications organization, extending the classroom based on occupational learning. 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)

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 emphasis 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 multidisciplinary lens while promoting group interaction and engagement. All students hired as the 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)

360 HIGH SCHOOL EQUIVALENCY PREPARATION
3 lab hours, (Repeats = 99), (Pass/No Pass), (Open Entry/Open Exit)
PREREQUISITE: None.
The High School Equivalency (HSE) Preparation course equips individuals with the skills and knowledge base necessary to pass the HSE exam. Students review the five examination content areas (language arts-reading and writing, mathematics, social sciences, and science) with particular emphasis on writing and math. Instructors will assess individual skill levels to help the student focus on tutoring weaknesses into strengths.

LIBRARY TECHNOLOGY (LITEC)

51 INTRODUCTION TO LIBRARY SERVICE
3 units, 3 lecture hours
PREREQUISITE: None.
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)
PREREQUISITE: None.
Cataloging of materials using Library of Congress and Dewey Decimal Classification systems. (A, CSU)

52B COLLECTION MANAGEMENT
1 unit, 1 lecture hour
PREREQUISITE: None.
Library technical services, acquisition and processing of materials, collection maintenance and materials repair. (A, CSU)

54 LITERATURE AND SERVICES FOR YOUTH
3 units, 3 lecture hours
PREREQUISITE: None.
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
PREREQUISITE: None.
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
PREREQUISITE: None.
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
PREREQUISITE: None.
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)
PREREQUISITE: None.
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
3 units, 3 lecture hours
PREREQUISITE: None.
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
3 units, 3 lecture hours
PREREQUISITE: None.
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  MACHINE SHOP AND EQUIPMENT REPAIR FOR MAINTENANCE MECHANICS
5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Open Entry/Open Exit), (Formerly MMCTC 70)
PREREQUISITE: None.
Manual machining and welding for equipment repair as needed for maintenance mechanics. Precision measurement, hand tools, engine lathe, drilling, milling, and power transmission principles.

371  HYDRAULIC AND PNEUMATIC FUNDAMENTALS FOR MAINTENANCE MECHANICS
5.55 lecture hours, 11.11 lab hours, (Repeats = 3), (Open Entry/Open Exit), (Formerly MMVTC 71)
PREREQUISITE: None.
Hydraulic and pneumatic principles, pumps, actuators, valves, schematics, operating systems.
372 ELECTRICAL FUNDAMENTALS FOR MAINTENANCE MECHANICS
5.5 lecture hours, 11.1 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

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.

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.

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.

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.
MARKETING (MKTG)

10 PRINCIPLES OF MARKETING
3 units, 3 lecture hours
ADVISORY: English 1A.
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: English 1A.
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: English 1A.
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: English 1A.
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)

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: English 1A.
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: English 1A.
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, search engine optimization, 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: English 1A.
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)

MATHEMATICS (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, UC, I)
4A TRIGONOMETRY
4 units, 4 lecture hours, (Formerly Mathematics 4)
PREREQUISITE: Mathematics 103 or placement by multiple measures. ADVISORY: Mathematics 102.
Topics include 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 placement by multiple measures.
Topics include equations and inequalities; 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 3A and 4A or placement by multiple measures.
An 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 placement by multiple measures.
Topics include 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 placement by multiple measures.
Topics include 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 Stokes Theorems. (C-ID MATH 230) (A, CSU-GE, UC, I)

7 INTRODUCTION TO DIFFERENTIAL EQUATIONS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 6 or placement by multiple measures.
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 placement by multiple measures.
Students will develop quantitative reasoning through an in-depth study of topics including real number systems and subsystems. The emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. The course is 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
Topics include probability, statistics, geometry, measurement, motion geometry, and tessellations. The course is designed for elementary credential candidates. (A, CSU-GE, UC, I)

11 ELEMENTARY STATISTICS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 103 or placement by multiple measures.
Topics include descriptive measures, probability and sampling distributions, central limit theorem, one and two sample hypothesis tests, analysis of variance, predictive techniques, correlation and regression. (C-ID MATH 110) (A, CSU-GE, UC, I)

11H HONORS ELEMENTARY STATISTICS
4 units, 4 lecture hours
PREREQUISITE: Mathematics 103 or placement by multiple measures. ADVISORY: Meet the qualifications for consideration into the Honors Program recommended. See Honors Program listing in the college catalog.
Topics include 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. (C-ID MATH 110) (A, CSU-GE, UC, I)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Prerequisites</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Differential Equations and Linear Algebra</td>
<td>5</td>
<td>5</td>
<td>PREREQUISITE: Mathematics 6 or placement by multiple measures.</td>
<td>Topics include first-order ordinary differential equations, including separable, homogeneous of degree zero, Bernoulli and exact with applications and numerical methods. Students will also study solutions to higher order differential equations using undetermined coefficients, variation of parameters, and power series, with applications; solutions to linear and non-linear systems of differential equations, including numerical solutions; matrix algebra, solutions of linear systems of equations, and determinants; vector spaces, linear independence, basis and dimension, subspace and inner product space, including the Gram-Schmidt procedure, as well as linear transformations, kernel and range, eigenvalues, eigenvectors, diagonalization and symmetric matrices. (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>21</td>
<td>Finite Mathematics</td>
<td>3</td>
<td>3</td>
<td>PREREQUISITE: Mathematics 103 or placement by multiple measures.</td>
<td>Topics include applications of linear, exponential, and logarithmic functions, matrix operations, and inverse matrices; linear programming techniques, mathematics of finance, probability, and counting theory; as well as limits, rates of change, and derivatives. (C-ID MATH 130) (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>26</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
<td>3</td>
<td>PREREQUISITE: Mathematics 5A or placement by multiple measures.</td>
<td>Topics include matrices and linear transformations, vector spaces, determinants, eigenvalues and eigenvectors. (C-ID MATH 250) (A, CSU-GE, UC, I)</td>
</tr>
<tr>
<td>42</td>
<td>Statistics for the Behavioral Sciences</td>
<td>4</td>
<td>4</td>
<td>PREREQUISITE: Mathematics 103 or placement by multiple measures.</td>
<td>Topics include 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)</td>
</tr>
<tr>
<td>45</td>
<td>Contemporary Mathematics</td>
<td>3</td>
<td>3</td>
<td>PREREQUISITE: Mathematics 103 or placement by multiple measures.</td>
<td>An introduction to mathematical problem solving: statistics, social choice, and management science. (A, CSU-GE, UC)</td>
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<tr>
<td>102</td>
<td>Plane Geometry</td>
<td>3</td>
<td>3</td>
<td>PREREQUISITE: None.</td>
<td>Students will study 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)</td>
</tr>
<tr>
<td>103</td>
<td>Foundations of Algebra</td>
<td>4</td>
<td>4</td>
<td>PREREQUISITE: None.</td>
<td>Topics include polynomial, rational, and algebraic expressions and equations; linear, quadratic, exponential, and logarithmic functions; systems of equations and inequalities; radicals; graphing functions and relations. (A)</td>
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<tr>
<td>201</td>
<td>Elementary Algebra</td>
<td>5</td>
<td>5</td>
<td>PREREQUISITE: None.</td>
<td>Topics include signed numbers, algebraic expressions, linear equations, exponents, polynomials, factoring, rational expressions and equations, graphing, inequalities, systems of equations, radicals, quadratic equations, and applications.</td>
</tr>
<tr>
<td>203S</td>
<td>Support for College Algebra</td>
<td>2</td>
<td>2</td>
<td>PREREQUISITE: Placement by multiple measures. COREQUISITE: Mathematics 3A.</td>
<td>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.</td>
</tr>
</tbody>
</table>
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 Elementary Statistics or Statistics for Behavioral Sciences. 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.

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. Knowledge of basic arithmetic. Biology 5 or 55.
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. Knowledge of basic arithmetic. Biology 5 or 55.
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
PREREQUISITE: Medical Assisting 4. ADVISORY: Eligibility for English 1A recommended. Knowledge of basic arithmetic. Biology 5 or 55.
Fundamentals of patient preparation for diagnostic studies. Techniques and recording of diagnostic and therapeutic procedures commonly performed in medical offices, safety standards and hazards, precautionary measures. (A, CSU)

6A CLINICAL TRAINING
3 units, 3 lecture hours, 1 lab hour,
(Formerly Medical Assisting 60A)
ADVISORY: Eligibility for English 1A recommended. Biology 5 or 55.
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 6A. ADVISORY: Eligibility for English 1A recommended. Biology 5 or 55.
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. 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 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  INTRODUCTION TO THE U.S. ARMY AND CRITICAL THINKING
   1 unit, 1 lecture hour
   ADVISORY: Eligibility for English 1A recommended.
   An introduction to the Army and critical thinking. Introduces Cadets to the Army and the Profession of Arms. Examines the Army Profession and what it means to be a professional in the U.S. Army. Develops basic knowledge and comprehension of the Army Leadership Requirements Model and a complete understanding of the Reserve Officers' Training Corps (ROTC), its purpose, and the advantages for the student. Cadets also learn how resiliency and fitness support their development as Army Leaders. (A, CSU, UC)

2  FOUNDATIONS OF AGILE AND ADAPTIVE LEADERSHIP
   1 unit, 1 lecture hour
   ADVISORY: Eligibility for English 1A recommended.
   Introduces Cadets to the personal challenges and competencies that are critical for effective leadership. Personal development of life skills such as critical thinking, time management, goal setting, and communication. Cadets learn the basics of the communications process and the importance for leaders to develop the essential skills to effectively communicate in the Army. (A, CSU, UC)

11 LEADERSHIP AND DECISION-MAKING
   2 units, 2 lecture hours
   ADVISORY: Eligibility for English 1A recommended.
   Leadership and decision-making. Application of Troop Leading Procedures (TLP) and Innovative Solutions to Problems in concert with the Principles of Mission Command. The Army Profession is also stressed through leadership forums and a leadership self-assessment. (A, CSU, UC)

12 ARMY DOCTRINE AND TEAM DEVELOPMENT
   2 units, 2 lecture hours
   ADVISORY: Eligibility for English 1A recommended.
   Army Doctrine and team development. Beginning understanding and demonstration of competencies related to Army doctrine. Army Values, Teamwork, and Warrior Ethos and their relationship to the Law of Land Warfare and the philosophy of military service are also stressed. The ability to lead and follow is also covered through Team Building exercises in small units up to squad level. (A, CSU, UC)

50 FRESHMAN LEADERSHIP LABORATORY I
   1 unit, 3 lab hours, (Formerly Military Science 50A)
   ADVISORY: Eligibility for English 1A 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.
   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.
   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.
   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)

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.
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)

1AE MUSIC THEORY I-EXTRA
3 units, 3 lecture hours, 1 lab hour
COREQUISITE: Music 7A. ADVISORY: Music 3.
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. (C-ID MUS 120) (A, CSU, UC)

1B MUSIC THEORY II
3 units, 3 lecture hours, (Spring only)
PREREQUISITE: Music 1A. COREQUISITE: Music 7A.
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.
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.
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
PREREQUISITE: None.
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)

3P MUSIC FUNDAMENTALS PLUS
3 units, 3 lecture hours, 1 lab hour
PREREQUISITE: None.
An enriched study of music fundamentals for the general student with intellectual curiosity or the music major with little or no prior musical training. Examination of pitch, rhythm, meters, scales, keys, key signatures, intervals, rhythm, scale dictation, melodic structure, and voice leading. (C-ID MUS 110) (A, CSU)

4 JAZZ THEORY
3 units, 3 lecture hours, (Fall only)
ADVISORY: Ability to read and notate music. Familiarity with basic scale and chord construction.
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.
Use of MIDI, synthesizers, drum machines, computers, sequencing, sound design, and digital audio workstation software to compose, edit, record, mix and master music. Students will create and compose original music and personal arrangements in styles reflecting modern production techniques. (A, CSU, UC)

5B MUSIC FOR FILM, TELEVISION, AND VIDEO GAMES
3 units, 2 lecture hours, 2 lab hours
PREREQUISITE: Music 5.
Advanced computer music production techniques applicable to film, television and video games. Includes MIDI production with digital audio workstations, scoring methods, mixing and mastering for visual media. (A, CSU)
6  JAZZ ARRANGING AND COMPOSITION
   3 units, 3 lecture hours, (Spring only)
   ADVISORY: Music 1A, 3, or 4. Ability to read and notate music
   in treble and bass clefs strongly 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.
   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.
   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.
   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.
   Develops the 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
   PREREQUISITE: None.
   This course is an introduction to the art and science of audio
   engineering. It covers fundamental concepts and techniques, including
   the use of digital audio workstations, basic acoustics, signal flow, mi-
  crophone principles and usage, studio equipment, signal processing,
   recording console functions, and multi-track recording procedures.
   Designed for students in music, commercial music and electronic media.
   (C-ID CMUS 130X) (A, CSU, UC)

8B  AUDIO ENGINEERING II
   3 units, 2 lecture hours, 3 lab hours
   PREREQUISITE: Music 8.
   An intermediate course in audio recording. It focuses audio en-
   gineering skills including audio production, digital audio workstations,
   post-production audio, microphone placement, session procedures,
   digital signal processing, mixing techniques, and basic mastering skills.
   (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.
   Study of basic orchestration, writing short musical compositions;
   emphasis on 20th century practices; compositions performed in recital.
   (A, CSU, UC)

93  SONGWRITING
   3 units, 3 lecture hours
   PREREQUISITE: None.
   The study of songwriting and concept development from initial
   idea to its realization in a musical style. Topics include: approaches and
   techniques of song composition, creating lyrics, characteristics of diverse
   musical styles, steps in adapting ideas to music creation, songwriting
   and arranging. (A, CSU)

111  MUSIC BUSINESS
   3 units, 3 lecture hours, (Formerly
   Music 11)
   PREREQUISITE: None.
   Survey of topics of importance to the music industry professional:
   Management, copyright, publishing, contracts, promotion, revenue
   sources 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  MUSIC 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  MUSIC 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: English 1A.
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: English 1A.
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: English 1A.
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, I)

16 JAZZ HISTORY AND APPRECIATION
3 units, 3 lecture hours
ADVISORY: English 1A.
Vocal and instrumental jazz music from the 1890's 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: English 1A.
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.
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)
PREREQUISITE: None.
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)  
PREREQUISITE: None.  
Beginning vocal concepts, technique and music fundamentals, using entry level literature ranging from diverse world cultures and historical periods through folk, musical theatre, and art songs. Designed for the student with little or no formal vocal 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.  
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.  
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)

80A APPLIED MUSIC MASTERCLASS A  
1 unit, 3 lab hours, (Formerly Music 80)  
PREREQUISITE: Music 21, 25, or 28. Audition required if student has not taken the prerequisite beginning-level-two course in guitar, piano, or voice or there is no beginning-level course in the discipline as with brass, percussion, strings, and woodwinds.  
Intermediate/advanced-level musical performance instruction in a group setting. Students perform for and with peers. Instructor facilitates dialogue about technical, interpretive, practice, performance, and career topics. Primarily for Music certificate-seeking or non-major students. Course emphasizes technical development. (A, CSU, UC)

80B APPLIED MUSIC MASTERCLASS B  
1 unit, 3 lab hours  
PREREQUISITE: Music 21, 25, or 28. Audition required if student has not taken the prerequisite beginning-level-two course in guitar, piano, or voice or there is no beginning-level course in the discipline as with brass, percussion, strings, and woodwinds.  
Intermediate/advanced-level musical performance instruction in a group setting. Students perform for and with peers. Instructor facilitates dialogue about technical, interpretive, practice, performance, and career topics. Primarily for Music certificate-seeking or non-major students. Course emphasizes musical expression. (A, CSU)

80C APPLIED MUSIC MASTERCLASS C  
1 unit, 3 lab hours  
PREREQUISITE: Music 21, 25, or 28. Audition required if student has not taken the prerequisite beginning-level-two course in guitar, piano, or voice or there is no beginning-level course in the discipline as with brass, percussion, strings, and woodwinds.  
Intermediate/advanced-level musical performance instruction in a group setting. Students perform for and with peers. Instructor facilitates dialogue about technical, interpretive, practice, performance, and career topics. Primarily for Music certificate-seeking or non-major students. Course emphasizes repertory development. (A, CSU)
80D  APPLIED MUSIC MASTERCLASS D  
1 unit, 3 lab hours  
PREREQUISITE: Music 21, 25, or 28. Audition required if student has not taken the prerequisite beginning-level-two course in guitar, piano, or voice or there is no beginning-level course in the discipline as with brass, percussion, strings, and woodwinds.  

81  APPLIED MUSIC MASTERCLASS AND LESSONS  
1 unit, 4 lab hours, (Repeats = 3)  
PREREQUISITE: Music 21, 25, or 28. Audition required if student has not taken the prerequisite beginning-level-two course in guitar, piano, or voice or there is no beginning-level course in the discipline as with brass, percussion, strings, and woodwinds. COREQUISITE: Music 1A, 1AE, 30, 34, 35, 39A, 39B, 39C, 39D, 40, 41, 46, 47A, 47B, 47C, 47D, 48, 53, 54, 55, 60, 68, 76, or 92.  
Intermediate/advanced-level musical performance instruction in a group setting with concurrent private instruction. Progressive development of skills and knowledge needed for solo performance, auditions, and transfer. Achievement evaluated through a juried performance. Recital participation required. Appropriate for Music Majors. (C-ID MUS 160) (A, CSU, UC)

322  SENIOR PIANO SKILLS  
1 lecture hour, 3 lab hours, (Repeats = 99)  
PREREQUISITE: Students must meet the minimum age requirement.  
Builds skills in piano performance including technical, stylistic and aesthetic elements of the standard repertory. Weekly individual instruction including ensemble and solo performance required. Students must perform solo juries in front of faculty each semester. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

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, aesthetic, and expressive elements of standard solo vocal literature. Solo performance required. Baroque, Classical, Romantic, 20th Century and World Music literature assigned as appropriate to the student's development level. Weekly individual instruction, recital performance, and semester-culminating jury required. Audition necessary. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

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. Develops technical, stylistic, and aesthetic elements of guitar playing. Ensemble and solo performance required. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.
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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

354 SENIOR LATIN JAZZ SKILLS
4 lab hours, (Repeats = 99), (Formerly Music 348)
PREREQUISITE: Students must meet minimum age requirements. 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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

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.
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; 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 auditions and jury exams 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: 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 16th-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. Students will, at discretion of instructor, be entered into festivals and competitions for performance credit. (C-ID MUS 160) (A, CSU, UC)

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42B INTERMEDIATE/ADVANCED WOODWINDS (WOODWIND CHOIR)  
1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 43)  
ADVISORY: 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 woodwinds which will include historical and cultural investigation of 16th-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: 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 16th-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. Performances will be held at approved on campus events, including off-campus festivals and competitions. Participation in all performances required. (C-ID MUS 160) (A, CSU, UC)

42D INTERMEDIATE/ADVANCED PERCUSSION (PERCUSSION ENSEMBLE)  
1-2 units, 1 lecture hour, 1-3 lab hours, (Repeats = 3), (Formerly Music 46)  
ADVISORY: 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 16th-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. Performances will be held at approved on campus events, including off-campus festivals and competitions. Participation in all performances required. (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.  
Study of music required for auditions to professional ensembles and transfer institutions. Advanced-level ensemble works emphasized and solo repertoire included. Designed for music major or transfer students. Audition required. (A, CSU, UC) (C-ID MUS 160)

59 ADVANCED CHAMBER ENSEMBLES  
1 unit, 3 lab hours  
ADVISORY: Ability to perform advanced level chamber music as determined by audition.  
Study of music required for auditions to professional ensembles and transfer institutions. Advanced-level chamber ensemble works emphasized and solo repertoire included. Designed for music major or transfer students. Audition required. (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.  
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.  
Study and performance of small choral ensemble specializing in early music. Repertoire 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
   1-2 units, 4-6 lab hours, (Repeats = 3),  
   (Formerly Music 33)
   ADVISORY: Ability to perform advanced high school choral  
   music. Audition required.
   Study and performance of advanced-level 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. (C-ID MUS 180) (A, CSU, UC)

39A  OPERA WORKSHOP
   1 unit, 4 lab hours, (Repeats = 3)
   ADVISORY: Music 26 or the equivalent as determined by audition  
   recommended.
   The rehearsal, study, research, and performance of scenes and  
   complete operatic works from the Baroque and Classical periods. (C-ID  
   MUS 180) (A, CSU, UC)

39B  OPERA PRODUCTION
   1 unit, 4 lab hours, (Repeats = 3)
   ADVISORY: Music 26 or the equivalent as determined by audition  
   recommended.
   The study, rehearsal, research, and performance of major Roman-  
   tic and Modern operatic works. Performances include vocal concerts,  
galas, reviews and fully staged operas or operettas. (C-ID MUS 180) (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.
   Modern literature with an emphasis on compositions of com-  
posers 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 will be held at approved on campus  
events, including off-campus festivals and competitions. 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 expe-  
rience or the equivalent performance skills as determined by audition  
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.
   Study and performance of orchestral literature of all eras. Rep-  
ertoire 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. Performances will be held  
at approved on campus events, including off-campus festivals and  
competitions. (C-ID MUS 180) (A, CSU, UC)

47A  JAZZ COMBO A
   1 unit, 4 lab hours, (Repeats = 3)
   ADVISORY: Ability to perform on an instrument or voice at college  
level as determined by audition. Music 10A or 10B recommended.
   Small-group jazz performance: standard literature, informal  
("head") arrangements, and student compositions or arrangements.  
In-class and/or public performances. (C-ID MUS 180) (A, CSU, UC)

47B  JAZZ COMBO B
   1 unit, 4 lab hours, (Repeats = 3)
   ADVISORY: Ability to perform on an instrument or voice at college  
level as determined by audition. Music 10A or 10B recommended.
   Study and performance of Contemporary and Mainstream jazz  
literature for the small ensemble (3-7 members per ensemble). Partici-  
pation in concerts and festivals required. (C-ID MUS 180) (A, CSU, UC)

54   LATIN JAZZ ENSEMBLE
   1 unit, 4 lab hours, (Repeats = 3)
   ADVISORY: Ability to perform on an instrument or voice at college  
level as determined by audition. Based on shared African and Caribbean  
influences and heritage. Participation in concerts is required. (C-ID MUS 180) (A, CSU, UC)
55 LATIN JAZZ WORKSHOP
1 unit, 4 lab hours, (Repeats = 3)
ADVISORY: Ability to perform on an instrument or voice at college level as determined by audition.
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.
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)

68 SYMPHONIC BAND
1-2 units, 4-6 lab hours, (Repeats = 3)
PREREQUISITE: Intermediate/advanced level skill on a band instrument recommended. Audition required.
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)

72 JAZZ COMPOSER'S ORCHESTRA
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.
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.
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)

92 VOCAL JAZZ WORKSHOP
2 units, 1 lecture hour, 4 lab hours, (Repeats = 3)
ADVISORY: Advanced high school vocal experience, or equivalent performance skills recommended.
Rehearsal and performance of solo and ensemble vocal jazz 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)

335 SENIOR CITY SINGERS
4-6 lab hours, (Repeats = 99), (Pass/No Pass)
PREREQUISITE: Students must meet minimum age requirement. Advanced singing skills, performance practice and chamber ensemble work from all periods of standard choral literature will be studied. Participation in 1 semester performance will be required by students. Weekly sectionals also assigned during the semester. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

339 SENIOR OPERA WORKSHOP
4 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. Develops technical, stylistic, and aesthetic elements of the standard performing repertory. Performance required. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

340 SENIOR SKILLS CONCERT BAND
4 lab hours, (Repeats = 99)
PREREQUISITE: Students must meet minimum age requirement. ADVISORY: Ability to perform advanced high school band music or the equivalent performance skills as determined by audition 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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.
**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 all eras and styles of jazz ensemble literature. 3-4 performances per semester required. Auditions advised. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

**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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

**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. The course meets the needs of Seniors by accommodating their physical abilities and utilizing their unique related experiences and knowledge.

**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 physics and chemistry 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)

**NURSING REGISTERED NURSING (RN)**

**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)

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, 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)

56 NURSING CARE OF INFANTS AND CHILDREN
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 62 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 units, 9 lab hours
PREREQUISITE: Registered Nursing 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)
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, treatment modalities, delivery of mental health care services, mental health legislation, and the role and responsibilities of the psychiatric/mental health nurse. (A, CSU)

NURSING CARE OF THE CLIENT WITH BEHAVIORAL AND EMOTIONAL DISORDERS CLINICAL
1.5 units, 4.5 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)

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)

TRANSITION TO FRESNO CITY COLLEGE REGISTERED NURSING PROGRAM SKILLS
1 unit, 3 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)

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)

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)

NCLEX-RN REVIEW
2 units, 2 lecture hours, (Pass/No Pass)
COREQUISITE: Registered Nursing 61.

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.

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.

CARE OF THE CHILDBEARING AND PARENTING FAMILY THEORY
1 unit, 1 lecture hour, (Pass/No Pass)
PREREQUISITE: Acceptance into the RN program as an LVN to RN, transfer, or international student.
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, (Pass/No Pass) 
PREREQUISITE: Acceptance into the RN program as an LVN to RN, transfer, or international student. 
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: English 1A. 
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 proceedings, 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 ADMINISTRATION AND ETHICS  
3 units, 3 lecture hours 
COREQUISITE: Paralegal 1. 
Principles of law office management and operation to include professional ethics, 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)

9 **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)

10 **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)

11 **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)

12 **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)

13 **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)

14 **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)
156 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.  
Producing and formatting business and legal correspondence and documents using a current word processing program. (A)

1CH HONORS ETHICS  
3 units, 3 lecture hours  
COREQUISITE: 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)

1A THEORIES OF KNOWLEDGE AND REALITY  
3 units, 3 lecture hours  
COREQUISITE: English 1A.  
An introduction to philosophical thinking on the nature of knowledge, truth, and reality. (C-ID PHIL 100) (A, CSU-GE, UC, I)

1AH HONORS THEORIES OF KNOWLEDGE AND REALITY  
3 units, 3 lecture hours, (Formerly Honors 1P)  
COREQUISITE: 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)

2 CRITICAL REASONING AND ANALYTIC WRITING  
3 units, 3 lecture hours, (Formerly Philosophy 4)  
PREREQUISITE: English 1A.  
Principles and methods of good reasoning and analytic writing, emphasizing deductive logic (including formal techniques of sentential logic), thesis-driven argumentation, and research strategies. Includes the identification of arguments, developing and assessing basic deductive and inductive written arguments, common fallacies, and application of each element to various areas of study and real-world situations. (C-ID ENGL 105) (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 and analytic writing, emphasizing deductive logic (including formal techniques of sentential logic), thesis-driven argumentation, and research strategies. Includes the identification of arguments, developing and assessing basic deductive and inductive written arguments, common fallacies, and application of each element to various areas of study and real-world situations. (C-ID ENGL 105) (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. (C-ID PHIL 130) (A, CSU-GE, UC, I)
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)

6 INTRODUCTION TO LOGIC
3 units, 3 lecture hours
ADVISORY: English 1A.
Introduction to methods of reasoning. Instruction in induction and deduction included, with an emphasis on deduction. Topics include formal and informal fallacies, as well as symbolization, syntax, and natural deduction for sentential and predicate logic. (C-ID PHIL 210) (A, CSU-GE, UC)

PHOTOGRAPHY (PHOTO)

5 INTRODUCTION TO PHOTOGRAPHY
3 units, 3 lecture hours
PREREQUISITE: None.
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
PREREQUISITE: None.
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: Basic computer skills 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)

14 PHOTOGRAPHY FOR SOCIAL MEDIA
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: None.
Photographic principals of creating images specifically intended for Social media publishing and use. Creation of creative visuals to meet specific client needs and online platform criteria. This course will also explore cultural and ethical implications for contemporary online publishing. (A, CSU)

15 PHOTOGRAPHY AND VISUAL LITERACY
3 units, 3 lecture hours
PREREQUISITE: None.
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, UC)

17 CLASSIC BLACK AND WHITE PHOTOGRAPHY
3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 10)
ADVISORY: Photography 5.
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 ADVANCED 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 film and digital black and white photography. Adobe Photoshop and other software applications are used on a variety of projects. The course emphasizes 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)

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)

45 ADVANCED PROJECTS
3 units, 2 lecture hours, 3 lab hours
PREREQUISITE: Photography 18, 23, 26, or 32.
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, UC)

52 ADOBE LIGHTROOM
3 units, 2 lecture hours, 3 lab hours,
(Formerly Graphic Communications 52)
PREREQUISITE: None.
Digital image enhancement and management with Adobe Lightroom. Focus will be on non destructive photographic workflow and improvement to tonal quality. (A, CSU)

57 APPLIED COLOR AND ALTERNATIVE PHOTOGRAPHIC MEDIA
3 units, 2 lecture hours, 3 lab hours
(Formerly Photography 12)
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)

67 INTRO TO DRONE AERIAL MULTIMEDIA
0.5 unit, 1 lecture hour, 2 lab hours, (9 weeks), (Formerly Photography 267)
PREREQUISITE: Must have ability to use both hands on controller and be able to keep visual line of sight with drone. ADVISORY: Photography 6.
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. (A, CSU)

77 AERIAL MULTIMEDIA II
3 3 units, 2 lecture hours, 3 lab hours,
(Formerly Photography 277)
PREREQUISITE: Photography 67. 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. (A, CSU)

320 SPECIAL EVENT PHOTOGRAPHY
1 lecture hour, 3 lab hours, (Retakes = 3)
Still image and video course to introduce the process of planning, marketing and setup of image capture for a special event in community.
PHYSICAL EDUCATION (PE)

GENERAL ACTIVITY COURSES

4  BADMINTON
   1 unit, 3 lab hours, (Formerly Physical Education ACT 1)
   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)

12  SWIMMING
    1 unit, 3 lab hours, (Formerly Physical Education ACT 16A)
    ADVISORY: Eligibility for English 1A recommended.
    Techniques of swimming and conditioning for beginning and advanced swimmers. Stroke technique drills and conditioning workouts. (A, CSU, UC)

12B  INTERMEDIATE SWIMMING
    1 unit, 3 lab hours
    PREREQUISITE: Physical Education 12.
    Intermediate drills and conditioning workouts for experienced swimmers. (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 or 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)

14  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)

14B  INTERMEDIATE VOLLEYBALL
    1 unit, 3 lab hours
    PREREQUISITE: Physical Education 14 or experience playing at the junior varsity or varsity high school level may satisfy prerequisite.
    An expanded approach to the fundamental of volleyball strategies. Students will build upon their knowledge of the game of volleyball, and be able to successfully compete with peers of their skill level. (A, CSU)
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)

17B INTERMEDIATE YOGA
1 unit, 3 lab hours
PREREQUISITE: Physical Education 17.
Instruction and practice in the fundamentals of yoga-based postures and transitions are designed to enhance strength, flexibility, balance and endurance. Emphasis on safety, proper body alignment, improved posture, and developing breathing and meditation techniques that encourage mind-body connection and relaxation response. This course is designed for advanced users. (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 pre-determined intervals on a regulation running track. The intervals will vary from 50 - 200 meters. (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)
PREREQUISITE: None.
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 CARE AND PREVENTION IN ATHLETIC POPULATIONS
4 units, 3 lecture hours, 3 lab hours, (Formerly Physical Education PRE 32)
PREREQUISITE: None.
Treating, prevention, and evaluating athletic injuries. Emergency first aid. (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)

26 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)

28 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)

62 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.

29B COMPETITIVE BADMINTON
   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)

29C OFF-SEASON CONDITIONING FOR BADMINTON
   1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for badminton players. (A, CSU, UC)

30B 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)

30C 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)

31B 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)

31C 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)
32B  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 MEN’S 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 MEN’S WRESTLING
1 unit, 3 lab hours, (Repeats = 2)
ADVISORY: Eligibility for English 1A recommended.
Off-season conditioning activities for Men’s wrestling. (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)

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)
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)

COMPETITIVE WOMEN’S WRESTLING
3 units, 9.5 lab hours, (Repeats = 2)
PREREQUISITE: None.
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, UC)

OFF-SEASON CONDITIONING FOR WOMEN’S WRESTLING
1 unit, 3 lab hours, (Repeats = 2)
PREREQUISITE: None.
Off-season conditioning activities for Women Wrestlers. (A, CSU-GE, 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)

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
COREQUISITE: Mathematics 5B. ADVISORY: Eligibility for English 1A recommended.
Classical mechanics: kinematics, Newton’s Laws, energy, momentum, gravitation, and fluids. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 205 and PHYS 200S = PHYS 4A + 4B + 4C) (A, CSU-GE, UC, I)

PHYSICS FOR SCIENTISTS AND ENGINEERS
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4A. COREQUISITE: Mathematics 5B.
ADVISORY: Mathematics 6.
Electricity and magnetism: electrostatics, electric potential, DC circuits, magnetic fields, induction, and AC circuits. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 210 and 200S = PHYS 4A + 4B + 4C) (A, CSU-GE, UC, I)

PHYSICS FOR SCIENTISTS AND ENGINEERS
4 units, 3 lecture hours, 3 lab hours
PREREQUISITE: Physics 4A. COREQUISITE: Mathematics 5B.
ADVISORY: Mathematics 6.
Oscillations, waves, thermodynamics, optics, relativity, quantum mechanics, and nuclear physics. Designed primarily for physics, engineering, and related majors. (C-ID PHYS 215 and 200S = PHYS 4A + 4B + 4C) (A, CSU-GE, UC, I)

MODERN POLITICS
3 units, 3 lecture hours
ADVISORY: Eligibility for English 1A.
An introduction to political science, designed to familiarize students with basic political concepts, ideologies, systems, and discipline subfields. (C-ID POLS 150) (A, CSU-GE, UC, I)
2 AMERICAN GOVERNMENT
3 units, 3 lecture hours
PREREQUISITE: Eligibility for English 1A. ADVISORY: English 1A.
Analysis of political and judicial institutions and processes, political ideology, political economy, civil rights, California state and local government. Satisfies the U.S. Constitution requirements and the national state and local government requirements for transfer students. (C-ID POLS 110) (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)

6 CALIFORNIA POLITICS AND GOVERNMENT
1 unit, 1 lecture hour
PREREQUISITE: None.
Analysis of the executive, judicial, legislative and local government structures and processes of California Government. (A, CSU-GE, UC)

13 LEGAL AND JUDICIAL REASONING
3 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: English 1A.
Scientific study of behavior and mental processes. Topics include history of psychology, research methods, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, mental illness and therapy, stress and health, social psychology, and the social and cultural influences that affect behavior. (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 of psychology, research methods, biopsychology, lifespan development, sensation and perception, consciousness and altered states, learning and memory, thought and language, intelligence, motivation and emotion, personality, mental illness and therapy, stress and health, social psychology, and the social and cultural influences that affect behavior. 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: English 1A and Psychology 2.
Systematic analysis of the social factors that influence human behavior and mental processes, including culture and gender. Focus on the mutual influence between the individual and the social environment. Emphasized topics include research methods and ethical principles, the self, social perception, social cognition, attitudes, persuasion, conformity and obedience, attraction and relationships, prosocial behavior, aggression, prejudice and discrimination, group phenomena, norms, and social neuroscience. (C-ID PSY 170) (A, CSU, UC)

12 CHILD ABUSE
3 units, 3 lecture hours, (See also Child Development 12)
ADVISORY: English 1A.

16 ABNORMAL PSYCHOLOGY
3 units, 3 lecture hours
ADVISORY: Psychology 2 and English 1A.
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 THE PSYCHOLOGY OF CRIMINAL BEHAVIOR
3 units, 3 lecture hours, (See also Criminology 18)
ADVISORY: English 1A.
Focus on the biological, psychological, developmental, social and cultural factors that influence the development of criminal behavior. Understand the relationship between psychological disorders outlined in the current Diagnostic and Statistical Manual of Mental Disorders, as well as psychopathy and sociopathy, and their influence on the development of criminal behavior. Explore the relationship between social inequities and the criminal justice system. Discuss the extent to which therapy and/or rehabilitation affects recidivism rates. (A, CSU)

25 HUMAN SEXUALITY
3 units, 3 lecture hours
ADVISORY: English 1A.
Explores human sexual behaviors and values in contemporary society from a biological, psychological, social, cultural, historical and lifespan perspective. Topics include research methods, sexual anatomy and physiology of males and females, gender development and socialization, contraception and abortion, conception and prenatal development, sexual orientation, love, communication and relationships, sexual patterns and techniques, sexual dysfunctions, sexually transmitted diseases, the causes and consequences of sexual victimization, atypical sexual behavior and the commercialization of sex 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: English 1A.
Provides a foundation of knowledge about psychological principles and concepts important to personal and social adjustment. Topics include personality, lifespan development, psychological factors that affect physical health and illness, the effects of stress, stress management, gender roles, interpersonal relationships, sexuality, work and leisure, psychological disorders, and therapy. Topics are 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, Biology 5, and English 1A.
Biological mechanisms central to fundamental concepts and issues of psychology. Topics include basic neuroanatomy, neurophysiology, and genetics; research methods in biological psychology; the physiological mechanisms underlying sensation, perception, consciousness, sleep, emotion, stress, sexual behavior, hunger, eating, language, learning, memory, neurological disorders, psychopharmacology, and psychological disorders; and the influence of environmental and psychological factors on biology. (C-ID PSY 150) (A, CSU, UC)

38 LIFESPAN DEVELOPMENT
3 units, 3 lecture hours, (See also Child Development 38)
ADVISORY: English 1A.
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: English 1A. Verification of freedom from tuberculosis. Optional verification of immunization against influenza.
Examines the major physical, cognitive, social and emotional developmental milestones for children from conception through adolescence. Emphasis on interactions between maturational processes and environmental factors. Students will observe children, evaluate individual differences, and analyze characteristics of development at various stages according to developmental theories. 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 placement by multiple measures.
Topics include 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. (A, CSU-GE, UC, I)

45 INTRODUCTION TO RESEARCH METHODS IN PSYCHOLOGY
3 units, 3 lecture hours
PREREQUISITE: Psychology 2 and Psychology 42 or Mathematics 42 or Mathematics 11. ADVISORY: English 1A.
Survey of psychological research methods. Emphasis placed on research design, descriptive techniques, experimental procedures, and the characteristics of valid assessment tools. Research design and methodology will be examined through a review of research in a variety of the subdisciplines of psychology. 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. Health Information Technology 10, Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1B, 1C, and 1D. ADVISORY: English 1A and Mathematics 201.
Radiography and its relation to radiology and the hospital; X-ray production, 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. Health Information Technology 10, Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1C, and 1D. ADVISORY: English 1A and Mathematics 201.
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. Health Information Technology 10, Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1D. ADVISORY: English 1A and Mathematics 201.  
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. Health Information Technology 10, Biology 20 and 22 or Biology 21A and 21B. COREQUISITE: Radiologic Technology 1A, 1B, and 1D. ADVISORY: English 1A and Mathematics 201.  
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, IC 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. (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. COREQUISITE: Radiologic Technology 5B and 5C.  
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. COREQUISITE: Radiologic Technology 5A and 5C.
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. COREQUISITE: Radiologic Technology 5A and 5B.
Fluoroscopy techniques including positioning the patient, selecting exposure factors and positioning fluoroscopy equipment. (A, CSU)

6 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, CSU)

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: English 1A.
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. ADVISORY: English 1A.
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)

15 INTRODUCTION TO RESPIRATORY CARE PROFESSION
1 unit, 1 lecture hour
PREREQUISITE: Acceptance into the Respiratory Care Program.
COREQUISITE: Respiratory Care 16, 16C, 17, and 20.
Respiratory Care Practitioner profession as it relates to evidence based practices, ethical and legal mandates, forms of communication, documentation, and information technology. (A, CSU)
Recreation

16 PATIENT ASSESSMENT
3 units, 3 lecture hours
PREREQUISITE: Acceptance into the Respiratory Care Program.
COREQUISITE: Respiratory Care 15, 16C, 17, and 20. ADVISORY: English 1A.
Introduction to basic cardiopulmonary assessment of patients with acute and chronic medical conditions. (A, CSU)

16B DIAGNOSTIC METHODS
3 units, 3 lecture hours
PREREQUISITE: Respiratory Care 15, 16, 16C, 17, and 20.
COREQUISITE: Respiratory Care 18, 21, 21C, and 26.
Diagnostic tools and techniques to obtain quantitative information for patient assessment. (A, CSU)

16C CLINICAL APPLICATIONS I
1 unit, 4 lab hours
PREREQUISITE: Acceptance into the Respiratory Care Practitioner Program. COREQUISITE: Respiratory Care 15, 16, 17, and 20.
Supervised assessment and treatment of cardiopulmonary patients in the acute care setting and simulation lab. (A, CSU)

17 RESPIRATORY CARE PHARMACOLOGY
3 units, 3 lecture hours
COREQUISITE: Respiratory Care 15, 16, 16C, 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 15, 16, 16C, 17, and 20.
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, and acid-base regulation. (A, CSU)

20 INTRODUCTION TO RESPIRATORY CARE MODALITIES
4 units, 4 lecture hours
PREREQUISITE: Acceptance into the Respiratory Care Practitioner Program. COREQUISITE: Respiratory Care 15, 16, 16C, 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
3 units, 3 lecture hours
PREREQUISITE: Respiratory Care 15, 16, 16C, 17, and 20.
COREQUISITE: Respiratory Care 16B, 18, 21C, and 26.
Selected therapeutic and diagnostic modalities for respiratory care, with the physical, mechanical and scientific principles associated with all attendant equipment. (A, CSU)

21B CLINICAL APPLICATIONS III
6 units, 19 lab hours
PREREQUISITE: Respiratory Care 18, 21, 21C, and 26. COREQUISITE: Respiratory Care 22, 24, and 25.
Supervised assessment and treatment of cardiopulmonary patients in acute care, sub-acute, and other specialty areas. Simulation lab. (A, CSU)

21C CLINICAL APPLICATIONS II
1 unit, 4 lab hours
PREREQUISITE: Respiratory Care 15, 16, 16C, 17, and 20.
COREQUISITE: Respiratory Care 16B, 18, 21, and 26.
Supervised assessment and treatment of cardiopulmonary patients in the acute care setting and simulation lab. (A, CSU)

22 INTRODUCTION TO MECHANICAL VENTILATION
2 units, 2 lecture hours
PREREQUISITE: Respiratory Care 16B, 18, 21, 21C, and 26.
COREQUISITE: Respiratory Care 21B, 24, and 25.
Introduction to initiation and management of mechanical ventilation. (A, CSU)

23 MECHANICAL VENTILATION MANAGEMENT
2 units, 2 lecture hours
Management of the complex mechanically ventilated patient. (A, CSU)

23B MECHANICAL VENTILATION MANAGEMENT
2 units, 2 lecture hours
Management of the complex mechanically ventilated patient. (A, CSU)
24  NEONATAL DISEASES
   2 units, 2 lecture hours
   PREREQUISITE: Respiratory Care 16B, 18, 21, 21C, and 26.
   COREQUISITE: Respiratory Care 21B, 22, and 25.
   Pathology, etiology, and management of neonatal diseases and disorders, including normal and abnormal fetal development. (A, CSU)

24B  PEDIATRIC DISEASES
   2 units, 2 lecture hours
   Pathology, etiology, and management of pediatric disorders. (A, CSU)

25  OBSTRUCTIVE RESPIRATORY DISEASES
   2 units, 2 lecture hours, (Spring)
   PREREQUISITE: Respiratory Care 16B, 18, 21, 21C, and 26.
   COREQUISITE: Respiratory Care 21B, 22, and 24.
   The pathology, etiology and management of obstructive respiratory diseases and disorders. (A, CSU)

25B  RESPIRATORY DISORDERS AND TRAUMA
   2 units, 2 lecture hours
   Pathology, etiology and management of restrictive disorders and trauma. (A, CSU)

26  AIRWAY MANAGEMENT
   1.5 units, 1.5 lecture hours
   PREREQUISITE: Respiratory Care 15, 16, 16C, 17, and 20.
   COREQUISITE: Respiratory Care 16B, 18, 21, and 21C.
   Applications and procedures to provide a patent airway. (A, CSU)

27  RESPIRATORY CARE REVIEW AND SIMULATIONS
   1 unit, 1 lecture hour
   PREREQUISITE: Respiratory Care 21B, 22, 24, and 25. COREQUISITE: Respiratory Care 23, 23B, 24B, and 25B.
   Preparation course for national exams and professional development. (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: English 1A.
   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: English 1A. 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 readings. (C-ID SOCI 110) (A, CSU-GE, UC, I)

1B  CRITICAL THINKING ABOUT SOCIAL PROBLEMS
   3 units, 3 lecture hours
   ADVISORY: English 1A or 1AH 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. Course uses both inductive and deductive forms of reasoning, including identifying formal and informal fallacies and analyzing the evidence on which conclusions are based. Application of critical thinking skills, specifically taught in the course, is designed to result in heightened critical thinking ability as well as strengthened social awareness concerning social problems. (C-ID SOCI 115) (A, CSU-GE, UC)
2 AMERICAN MINORITY GROUPS  
3 units, 3 lecture hours  
ADVISORY: English 1A.  
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: English 1A.  
Overview of social, economic, biological and psychological aspects of aging. Exploration of challenges and strengths of the aging people 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 English1A 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: English 1A.  
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: English 1A.  
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  
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 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. Participation 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, character building, scene and 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 control, 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.  
(C-ID THTR 172) (A, CSU)
### Theatre Arts

**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.

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### Vocational English as a Second Language (VESL)

**380 ENGLISH FOR CONSTRUCTION**

- **3 lecture hours, (Pass/No Pass), (Repeats = 1)**
- **ADVISORY:** Use of English as a second or other language.
- This course emphasizes a strong writing/reading curriculum based on workplace communication needs. Basic vocabulary for the construction industry will be taught through contextualization. Emphasis on written requirements for the workplace and reading skills required for workplace tasks. Effective communication skills relevant to students’ needs will be developed.

**Welding Technology (WELD)**

**1 EXPLORING WELDING/METALS**

- **3 units, 2 lecture hours, 3 lab hours,**
- **(Formerly Industrial Education 5)**
- **ADVISORY:** Applied Technology 130. Eligibility for English 1A 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:** Applied Technology 130. Eligibility for English 1A 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:** Welding Technology 2B. **COREQUISITE:** Computer Aided Drafting & Design 16. **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 Technology 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 Technology 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  
PREREQUISITE: Welding Technology 2B. ADVISORY: Applied Technology 130, Drafting 12, and eligibility for English 1A 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: Applied Technology 130, Drafting 12, and eligibility for English 1A recommended.  
Shielded Metal Arc, 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)

5A  AUTOMATED WELDING  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: None.  
The first of a two-part series introducing fundamental theory and hands-on application of robotic welding automation. Emphasizes safety awareness, programming techniques, and basic gas metal arc welding. Application will consist of using six-axis robotic welding equipment. (A, CSU)

5B  ADVANCED AUTOMATED WELDING AND CUTTING  
3 units, 2 lecture hours, 4 lab hours  
PREREQUISITE: Welding Technology 5A.  
The second of a two-part series introducing fundamental theory and hands-on application of robotic welding automation and cutting. Emphasizes safety awareness, programming techniques, and basic gas metal arc welding and plasma cutting applications using six-axis robotic welding and a 5 axis CNC plasma cutting system. (A, CSU)

6A  SHIELDED METAL ARC WELDING THEORY AND APPLICATION  
3.5 units, 2 lecture hours, 4.75 lab hours  
Theory and application of the shielded metal arc welding process. Welding will be done in the flat, horizontal, vertical and overhead positions on mild steel. This will prepare students to take the American Welding Society (AWS) D1.1 qualification test. An introduction to the principles of shielded metal arc welding (SMAW), setup/use of SMAW equipment, and safe use of tools and equipment. Provides instruction in welding carbon steel weld joints in various positions. (A, CSU)

6B  SEMI-AUTOMATED WIRE FEED WELDING  
3.5 units, 2 lecture hours, 4.75 lab hours  
Theory and application of semi-automatic wire feed process to include Gas Metal Arc Welding and Flux Core Arc Welding. Welding will be done in the flat, horizontal, vertical, and overhead position using mild steel, and stainless steel. (A, CSU)

6C  GAS TUNGSTEN ARC WELDING THEORY AND APPLICATION  
3.5 units, 2 lecture hours, 4.75 lab hours  
Theory and application of the Gas Tungsten Arc Welding (GTAW) process. Welding will be done in the flat, horizontal, vertical, and overhead position using mild steel, and stainless steel and aluminum. (A, CSU)

10  PIPE AND TUBE FITTING  
2 units, 1 lecture hour, 3 lab hours  
This course assists students in pipe and tube fitting, measurements, patterns, marking and layout tools used in the pipe welding industry. Techniques of fitting and cutting various pipe and tubing joint designs will be practiced. (A, CSU)
56  BLUEPRINT READING FOR WELDERS  
2 units, 2 lecture hours  
ADVISORY: Applied Technology 130. Eligibility for English 1A recommended.  
Basic fundamentals of blueprint reading and welding symbol interpretation as required by the welding trade. (A, CSU)

83A  INDUSTRIAL ROBOTICS - INTRODUCTION  
3 units, 3 lecture hours, 1 lab hour, (See also Electrical Systems Technology 83A)  
ADVISORY: Electrical Systems Technology 55A.  
This introduction covers the basic operation, programming, and vision integration with industrial robots. (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.  
Social, political, cultural, and economic history of women in American society; employment, domesticity, feminism, struggles for equal rights; 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.  
This course offers an interdisciplinary analysis of Chicana and Mexican American women in contemporary society. Special emphasis is placed on the role and impact of family, church, education, economics, and politics. An exploration of gender, sexuality, racialization and intersectionality will occur as well as a critical review of how struggle, resistance, racial and social justice, solidarity, and liberation emerge in Chicana experiences. (A, CSU-GE, UC)

25  ASSERTIVENESS TRAINING  
2 units, 2 lecture hours, (See also Human Services 25)  
ADVISORY: English 1A.  
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)
WOMEN’S LITERATURE
3 units, 3 lecture hours, (See also English 36)
PREREQUISITE: English 1A.
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, to develop close reading and analytical writing skills, promote appreciation and critical understanding of the diverse cultural, historical, and aesthetic qualities of literature. (A, CSU-GE, UC, I)

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, UC)

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)

WOMEN IN MANAGEMENT
3 units, 3 lecture hours
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)

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)

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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Dean of Instruction, Allied Health, Physical Education, and Athletics Division
Dr. Timothy J. Woods
Dean of Instruction, Business Division
Kerry Ybarra
Interim Dean of Instruction, Academic Services and Humanities Pathways Division

Student Services Deans
Dr. Kurt Piland
Dean of Student Services, Counseling and Guidance
Sean Henderson
Dean of Student Services
Faculty and Administration

Adams, Alexis (2021)  
Director, Institutional Research, Planning, and Effectiveness  
B.A., M.A., Ph.D., University of New Mexico

Adams, Darren (2013)  
Electrical Systems Technology

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

Alvarado, George (2021)  
Director, Counseling and Special Projects  
B.A., M.S.W., M.A., Ed.D., California State University, Fresno

Alvarez, David (2020)  
Automotive Technology

Anderson, Lydia (1997)  
Business Administration/Marketing  
A.A., Reedley College  
B.S., M.B.A., California State University, Fresno

Antonio, Estefana (2013)  
Child Development Coordinator  
B.S., M.A., California State University, Fresno

Arriola, Susan (2019)  
Director, Disabled Students Programs and Services  
A.A., West Hills College  
B.A., M.S., California State University, Fresno

Attkisson, Rodney (2022)  
Construction  
A.S., Reedley College

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

Baer, Kristin (2022)  
Librarian  
B.A., M.A., California State University, Fresno  
MLIS, California State University, San Jose

Baker, Brian (2012)  
Computer Science  
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

Benavides, Victoria (2021)  
Chicano-Latino Studies  
B.A., University of California, Berkeley  
M.A., Seattle University  
M.S., University of Arizona, Tucson

Berg, Emily (2022)  
Director, Dual Enrollment  
B.A., University of California, Davis  
M.A., California State University, Sacramento  
Ed.D., Brandman University, Irvine

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

Bolen, Gennean (2001)  
English  
B.A., Oral Roberts University  
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

Bui, Linh (2022)  
*Dental Hygiene/Assisting*  
A.S., Fresno City College  
B.S., Grand Canyon University, Phoenix

Cacossa, Peter (2018)  
*Director, Fire Academy*  
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)  
*Criminology*  
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

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  
M.S., National University

*Developmental English*  
B.A., University of California, Davis  
M.F.A., California State University, Fresno

Chavez, Carlos (2021)  
*Fire Technology Instructor/Coordinator*  
A.S., Fresno City College  
A.A.S., Community College of the Air Force  
B.A., B.S., California State University, Fresno  
M.A., Fresno Pacific University

Cherry, Rebecca (2019)  
*Chemistry*  
B.S., M.S., University of Colorado, Denver

Christl-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

Chin, Steven (2021)  
*Film*  
B.A., University of California, San Diego  
M.F.A., Chapman University, Orange

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., M.A., University of Southern California

Cornel, Megan (2020)  
*Biology*  
B.S., M.S., California State University, Fresno

Cortez, 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

Crill-Hornsby, Cherylyn (2020)  
*Dean of Instruction, Academic Services and Social Sciences Pathways Division*  
A.A., Fresno City College  
B.A., M.A., California State University, Fresno

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

Curtis, Carol (1994)  
*Mathematics*  
B.A., M.A., Ed.D., California State University, Fresno

Dancy, Karen (2008)  
*Business & Technology*  
B.S., California Polytechnic University, Pomona  
M.B.A., DeVry University
Davey, Jonathan (2011)
Culinary Arts
A.O.S., Le Cordon Bleu
B.S., Brigham Young University

Davies, Karen (2008)
English
B.A., University of California, San Diego
M.F.A., Brown University

Davis, Theophilus (2005)
Welding Technology
A.S., Austin Community College

Day, Diana (2009)
Respiratory Care
A.S., Tulsa Junior College
B.S., M.B.A., University of Phoenix

Deasy, Sara P. (2019)
Photography
A.A., Fresno City College
B.A., M.A., California State University, Fresno

De Freitas, Diane (2008)
Economics
A.A., American River
B.S., M.A., California State University, Hayward

DeKlotz, Olena (2013)
English
B.A., Pedagogical College, Kyiv, Ukraine
M.A., University of Ukraine
M.A., California State University, Fresno

DeKruif, Linda (1998)
Women's Studies, Psychology
B.A., M.A., California State University, Fresno

Denis-Arrue, Nuria M. (2005)
Biology/Microbiology
B.A., M.A., California State University, Fresno

DeVoe-Peterson, Robert (2001)
Computer Information Technology
B.S., M.B.A., California State University, Fresno

Dorn, Lawrence S. (1989)
Mathematics, Developmental Math
B.A., California State University, Fresno
M.B.A., California State University, Fresno

Dowis, Hawkins (2007)
Biology
B.A., Pepperdine University
M.S., California State University, Fullerton

Duran, Jaime (2020)
Director, Veterans Resource Center
B.A., National University
M.S., California State University, Fresno
Ed.D., Liberty University, Lynchburg

Duarte, Caleb (2018)
Art, Sculpture
B.F.A., San Francisco Art Institute
M.F.A., School of the Art Institute of Chicago

Duarte, Sonia (2020)
Nursing
A.S., A.A., Fresno City College
B.S., M.S., University of Phoenix

Dustin, Ron (1996)
Accounting
A.A., Fresno City College
B.S., M.B.A., California State University, Fresno

Earley, Christopher (2021)
Music Theory
B.M., Washington State University, Pullman
M.M., Western Michigan University, Kalamazoo

Eizadiboroujeni, Farrokh (2019)
Communication Arts
B.A., M.A., California State University, Fresno

Epperson, Tamara (2010)
Accounting
B.S., California State University, Fresno
M.F.A., National University

Erickson, Mark (2016)
Industrial Mechanic

Erven, Milton "Chuck" (1999)
Theatre Arts
B.S., Eastern New Mexico University
M.A., University of Maryland

Escovedo, Erik (2022)
American Indian Studies/American Studies
A.A., Fresno City College
B.A., M.A., California State University, Fresno

Espinoza, Sophie (2022)
Radiologic Technology
A.S., Fresno City College
B.A., Fresno Pacific University
M.S., Western Governors University, Salt Lake City

Evans, Timothy (2022)
Physical and Natural Science
B.A., M.S., California State University, Fresno

Ezaki, Gretchen (2010)
Nursing
B.S., Pacific Lutheran University
M.S., California State University, Fresno

Farley, Verne (2021)
Computer Information Technology/Cybersecurity
B.A., California State University, Fresno
M.A., University of Phoenix

Fernandez, Kathleen (2016)
Criminology
B.S., M.S., California State University, Fresno
M.A., University of Phoenix

Fernandez, Saul (2021)
DSP&S Counselor
B.S., M.S., California State University, Fresno

Fief, Gary (2016)
Director, Police Academy
B.S., M.A., California Coast University

Fine, Richard (2022)
Theatre Arts/Costume Design
B.F.A., The Theatre School of DePaul University, Chicago
M.F.A., The New York Academy of Art, New York City

Fisher, Jessica (2015)
Adaptive English
A.A., Fresno City College
B.S., M.A., California State University, Fresno

Fletcher, Alex (2018)
Physical Education
A.A., Fresno City College
B.A., University of Lethbridge
M.A., Fresno Pacific University

Fletcher, Eric (1999)
Communication, Forensics
B.A., M.A., California State University, Fresno

Florence, Christine A. (2009)
Nursing
A.D.N., DeAnza College
B.S.N., M.S.N./Ed., University of Phoenix
Flores, Moses (2019)

Construction
A.S., Fresno City College
B.S., California State University, Fresno

Ford, Keith (2020)

English
A.A., Fresno City College
B.A., M.A., California State University, Fresno
M.A., University of California, Berkeley


Geology
B.S., M.S., California State University, Fresno

Forestiere, Marc C. (1996)

Computer Information Technology
B.S., California State University, Sacramento
M.A., Fresno Pacific College

Garcia, Salvador (2022)

American Sign Language
B.A., California State University, Fresno
M.A., Gallaudet University, Washington, D.C.

Garcia-Lupian, Sonia (2008)

Counselor
B.A., M.S.W., California State University, Fresno

Gaujardo, Ricco (2020)

Construction
A.A., B.A., International Apostolic Bible College, Fresno
A.S., Fresno City College


Developmental English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno

Gutierrez-Osborne, Virginia (2005)

Biology
B.A., M.A., California State University, Los Angeles
M.A., California State University, Fresno

Gutierrez-Sauceda, Nancy M. (2005)

Sociology
B.A., California State University, Fresno
M.A., University of Wisconsin

Guzman, Juan (2013)

English
B.A., M.F.A, California State University, Fresno

Hahn, Timothy (2020)

Police Academy
B.S., University of Phoenix
M.P.A., California State University, Fresno

Hairston, Alena (2022)

English
B.A., Guilford College, Greensboro
M.F.A., Brown University, Providence

Haldeman, Doug (2021)

Construction
A.A., Fresno College
B.Arch., California Polytechnic State University, San Luis Obispo

Hall, Lataria (2018)

Vice President of Student Services
A.A., College of the Sequoias
B.S., M.S., California State University, Fresno
M.A., National University

Harvey, Etienne (2022)

American Sign Language
A.A., Los Angeles City College
B.S., M.A., California State University, Los Angeles

Harvey Collins, Elena (2022)

Art History/ Curator
F.D.A.D., University of Arts, London
B.A., Kingston University, London
M.F.A., Columbus College of Art & Design

Haskell, Marc C. (1999)

Decision Science
B.A., California State University, Fresno
M.B.A., National University

Haynes, Robert (2021)

Physical Education/Basketball Coach
A.S., Porterville College
B.A., Chapman University, Orange
M.A., Fresno Pacific University

He, Jiandong (Jin) (1999)

Mathematics
B.S., Jilin University, Peoples Republic of China
M.S., California State University, Fresno
Heder, Jennifer (2022)  
Music/Choral  
B.M., M.M., Brigham Young University, Provo  
D.M.A., Michigan State University, East Lansing  

Henderson, Caleb (2015)  
Art  
B.F.A., Utah Valley University  
M.F.A., Tulane University  

Henderson, Sean (2010)  
Dean of Student Services, EOPS  
B.A., M.A., California State University, Fresno  

Henkle, Charles (2017)  
Coordinator, Police Academy  
B.S., California State University, Fresno  

Henkle, Jameson (2021)  
Geology  
B.S., University of California, Santa Barbara  
M.S., Colorado State University, Fort Collins  

Hentzler, Jerry (1999)  
Adaptive Ornamental Horticulture  
B.S., Kansas State University  

Hernandez, Maria (2013)  
Automotive Technology  
A.S., Fresno City College  

Hernandez, Nicholas R. (2019)  
Political Science  
B.A., San Francisco State University  
M.A., California State University, Fresno  

Herren, Brett (2007)  
Mathematics  
B.S., M.S., California Polytechnic, San Luis Obispo  

Herrick, Lee (1997)  
Developmental English  
B.A., M.A., California State University, Stanislaus  

Hess, Shivon (2021)  
Librarian  
B.A., University of North Florida, Jacksonville  
M.S., Florida State University, Tallahassee  

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  

Holland, Nancy (2001)  
Business Administration/Marketing  
A.S., College of the Sequoias  
B.A., California State University, Fresno  
M.S., Chapman University  

Howard, Jeannice (2013)  
Dental Hygiene  
A.S., Fresno City College  
B.A., M.A., Fresno Pacific University  

Hwang, Won Ho (2019)  
Geology/GIS  
B.S., Konkuk University  
M.S., Marshall University  
Ph.D., Virginia Polytechnic Institute and State University  

Islas, Matthew (2019)  
Coordinator, Extending the Classroom  
A.A., Fresno City College  
B.A., M.A., California State University, Fresno  

Iyoda, Hiromi (2022)  
Art  
A.A., Saddleback Community College  
B.A., California State University, Long Beach  
M.F.A., University of Nebraska, Lincoln  

Janzer, Haley (2021)  
Health and Physical Education/Softball Coach  
B.S., 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  

Jeffress, Charles (2021)  
Welding  
A.S., Fresno City College  

Jeydel, Alana (2021)  
Political Science  
B.A., Trinity College, Hartford  
M.A., Ph.D., American University, Washington, D.C.  

Biology  
A.A., Fresno City College  
B.S., California State University, Fresno  
M.S., Brigham Young University  

Johnson, Derrick (2020)  
Director, Athletics  
B.A., University of South Carolina  
M.S.S., Unites States Sports Academy  

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
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<th>Name</th>
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<td>Kerfoot, Mark</td>
<td>B.S., California State University, Sacramento</td>
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<td>Ph.D., University of California, Merced</td>
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<td>Keysaw, Paul</td>
<td>B.A., M.A., California State University, Bakersfield</td>
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<td>Keysaw, Christopher</td>
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<td>Khan, Kherstin</td>
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<td>Kouadio, Auguste</td>
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<td>Lewallen, Jennifer</td>
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<td>Lewis, Apryl</td>
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<td>Mac Leod, Susan</td>
<td>A.A.S., Lichtenberg-Oberstufengymnasium</td>
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<td>Magnia, Martha</td>
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<td>Marquez-Ramirez,</td>
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<td>Mathis, Jonathan</td>
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<td>Martinez, Brandi</td>
<td>B.A., B.S., M.S., California State University, Fresno</td>
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</table>
Martinez, Ernie  
*Director of Student Activities*
- Ph.D., Alliant University

Martinez, Robert II (2000)  
*Electrical Systems Technology*  
- B.S., California State University, Fresno

Martinez, Todd (1999)  
*Psychology*  
- B.A., M.A., California State University, Fresno
- Ph.D., University of Connecticut

Mason, Amanda (2020)  
*Communication Arts*  
- A.A., Merced Community College  
- B.A., M.A., California State University, Fresno

*Biology*  
- B.A., M.A., California State University, Fresno

McCollam-Martinez, Christina (2017)  
*Theatre Arts Scenic/Lighting Design*  
- A.A., Sierra College  
- B.A., California State University, Stanislaus  
- M.F.A., University of California, Davis

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)  
*Philosophy*  
- A.A., Fresno City College  
- B.A., The Master’s College  
- M.A.T., Fuller Theological Seminary M.Div., Gateway Seminary  
- M.A., Ph.D., University at Albany, SUNY

Mendoza, Matthew (2019)  
*Respiratory Care/Allied Health*  
- A.S., San Joaquin Valley College  
- A.S., Reedley College  
- B.S., California State University, Fresno  
- M.S., Northeastern University, Boston

Mimura, Stacie (2014)  
*Communication Arts*  
- B.A., M.A., California State University, Fresno

*American Sign Language*  
- A.S., Northwestern Connecticut Community College  
- B.S., University of Utah  
- M.S., California School of Professional Psychology

Mizner, Keith (2006)  
*Accounting*  
- A.A., College of the Sequoias  
- B.S., M.S., California State University, Fresno

*Computer Information Technology*  
- Air Force Academy  
- M.S., West Coast University

Montano, Samuel (2019)  
*Coordinator, Psychological Services*  
- B.A., University of Nevada, Las Vegas  
- Ph.D., Alliant University

Mosette, Mary Beth (2017)  
*Director CalWORKs*  
- B.S., Southeast Missouri State University  
- M.A., California State University, Fresno

Munoz, Evelyn (2021)  
*Biology*  
- A.A., College of the Sequoias  
- B.S., M.S., California State University, Fresno

Mushibie, Eliud (2018)  
*Chemistry*  
- B.S., University of Nairobi  
- M.S., University of Botswana  
- Ph.D., Binghamton University

Myers, Tiffany (2021)  
*DSP&S Counselor*  
- B.A., M.S., California State University, Fresno

Natal, Lori (2008)  
*Counselor*  
- A.A., Fresno City College  
- B.A., M.S., California State University, Fresno

*Sociology*  
- A.A., Fresno City College  
- B.A., California State University, Fresno  
- M.A., Ph.D., University of Oregon

Nelson, Gretchen (2009)  
*Nursing*  
- B.S.N., Washington State University  
- M.N., University of California at Los Angeles

Nelson, Rebecca (2007)  
*Business & Technology*  
- A.A., Reedley College  
- B.A., Fresno Pacific University  
- M.B.A., National University

Nesbitt, Keisha Lewis (2021)  
*Director, Nursing*  
- B.S., M.S., University of Phoenix

Nichols, Cheryl (2020)  
*College Nurse*

Norton, Kristen (2019)  
*English*  
- B.A., M.Ed., Texas Christian University  
- M.F.A., California State University, Fresno

*Radiologic Technology*  
- A.S., Fresno City College  
- B.S., California State University, Fresno  
- M.S., National University

Ochs, Raquel (2005)  
*Child Development*  
- B.S., California State University, Fresno  
- M.A., Pacific Oaks College

*Biology*  
- B.S., M.S., California State University, Fresno

O’Neil, Terrence (2017)  
*Criminology*  
- B.S., M.S., California State University, Fresno

Orfi, Nihal (2021)  
*Engineering*  
- M.Sc., Ph.D., Virginia Polytechnic Institute & State University, Blacksburg

Pacheco, Joanne (2001)  
*Dental Hygiene*  
- A.S., Fresno City College  
- B.A., Fresno Pacific University  
- M.A., Alliant International University
Pankratz, Aaron (2008)
Economics
B.A., M.P.P., Pepperdine University

Parish, Max G. (2019)
Philosophy
A.S., Reedley College
B.A., University of Illinois, Springfield
M.A., Ph.D., University of Oklahoma

Parker, Joshua (2015)
Biology
B.S., California State University, Stanislaus
M.S., Ph.D., University of California, Davis

Patterson, Teresa (2014)
Communication
B.A., Fresno Pacific University
M.A., California State University, Fresno
Ed.D., California State University, Fresno and University of California, Davis

Patin, Michelle (2008)
English
A.A., Fresno City College
B.A., M.F.A., California State University, Fresno

Perez, Carlos (2022)
Engineering
A.A., A.S., Los Angeles City College
B.S., M.S., California State University, Los Angeles
Ph.D., University of Texas, El Paso
Ed.D., California State University, Sacramento

Piland, Kurt (2022)
Dean of Students, Counseling and Guidance
B.A., M.S., California State University, Fresno
Ed.D., Northcentral University, Prescott Valley

Pinkard, Joyce (1997)
Spanish
B.A., M.A., Mississippi State University

Platas, Jose (2022)
Electrical Systems Technology
A.S., Fresno City College

Polanowski, Craig P. (1991)
Graphic Communications
A.A.S., Brookdale Community College, N.J.
B.S., Trenton State College, New Jersey
M.Ed., University of Massachusetts

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

Putman, Dale (2018)
Maintenance Mechanic
A.A., Fresno City College
B.S., California State University, Fresno

Radnejad, Forouzandeh (2005)
Counselor
B.A., Esfahan University, Iran
M.S., California State University, Fresno

Ragsdale, Michael (2017)
Astronomy/Physics
B.S., M.S., California State University, Fresno

Ramos Jimenez, Denia (2020)
Spanish
A.A., Orange Coast College
B.A., M.A., California State University, Fullerton

Ramos, Loretta (1994)
Communication
B.A., University of Southern California
M.A., California State University, Fresno
J.D., San Joaquin College of Law

Rard, Elizabeth (2022)
Philosophy
B.A., Ph.D., University of California, Davis
M.A., California State University, San Jose

Razee, Alan (2008)
Communication
B.A., California Polytechnic University, San Luis Obispo
M.A., Ph.D., University of Washington

Redondo, Emily (2021)
Photography/Graphic Communications
A.A., A.S., Fresno City College
B.A., California State University, Fresno

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

Rhames, Cathleen (2021)
Spanish
B.A., California Polytechnic State University, San Luis Obispo
M.A., California State University, Sacramento

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, Chelsea (2021)
Medical Assisting
A.S., West Hills College

Rivera, Ricardo (2016)
Art
B.F.A., M.F.A., San Francisco Art Institute

Robole, 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)
Counselor 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
A.A., Fresno City College
B.A., M.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, Gurminder (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

Sarkisian, Tiffany (2021)
Communication Arts
A.A., Reedley College
B.A., Fresno Pacific University
M.A., California State University, Fresno
Ed.D., George Fox University

Sayre, Daniel (2022)
Electrical Systems Technology
A.S., Fresno City College

Scheid, Elizabeth (2020)
English
B.A., M.A., California State University, Fresno

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

Schock, Kathleen (2020)
Journalism
B.A., University of California, Los Angeles
M.A., University of California, Berkeley
Ed.D., California State University, Fresno

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
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Sivas, Shushanek (2019)
Coordinator, Reading & Writing Center
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Slater, Emilee
Director, College Relations and Outreach
B.A., M.A., Fresno Pacific University

Staton, 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

Snyder, Stephanie (2020)
English
B.A., M.F.A., California State University, Fresno

Solberg, Eric (1999)
Physical Education
B.S., California State University, Fresno
M.S., U.S. Sports Academy

Sosa, Susana 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

Soublet, Monica (2021)
Child Development
B.S., M.A., California State University, Fresno

Spoehr, 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
Ph.D., Grand Canyon University, Phoenix

Starry, Matthew (2021)
Automotive Technology
A.S., Fresno City College
Stavtyska-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

Stehr, McKayla (2020)
History
A.A., Yakima Valley Community College
B.A., M.A., Central Washington University, Ellensburg
Ph.D., Marquette University, Milwaukee

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

Strobel, Amy (2020)
American Sign Language
B.A., California State University, Fresno
M.S., University of North Florida, Jacksonville

Sunahara, Beau (2021)
Automotive Technology/Automotive Mechanic
A.S., Fresno City College
B.S., California State University, Fresno

Tackett, Patrick (2017)
Counselor, Disabled Students Programs & Services
B.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, Jeffrey (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, Khamporn (2014)
Chemistry
A.A., Fresno City College
B.A., M.A., California State University, Fresno

Thomas, Fred (2017)
Dental Hygiene
B.A., A.S., Fresno City College
B.S., California State University, Fresno
M.S.A., California State University, Bakersfield

Thomas, Jason (2021)
Biology
B.S., M.S., California State University, Fresno

Thornburgh, James (2021)
Computer Aided Drafting & Design
B.A., A.S., Sierra College, Rocklin
B.S., M.S., Ed.D., California State University, Fresno

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

Tobar, Alyssa (2022)
English for Multi-Lingual Students
B.A., M.A., 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

Uvarov, Catherine (2016)
Chemistry
B.S., Ph.D., University of California, Davis

Vahanian, Jennifer (2022)
English for Multi-Lingual Students
B.A., California State University, Fresno
M.A., California State University, Los Angeles

Valentinio, Mary Ann (2004)
Psychology
B.A., San Diego State University
Ph.D., California School of Professional Psychology

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

Chemistry
A.S., Columbia College
B.S., M.S., California State University, Fresno
Venezia, Brenda (2020)  
*English*  
B.A., M.F.A., California State University, Fresno

*Mathematics*  
B.A., California State University, Fresno  
M.A., Fresno Pacific University

Vinicor, Melinda (2009)  
*Sociology*  
B.A., Pepperdine University  
M.A., San Jose State University

Visveshwara, Nicola A. (2019)  
*Nursing*  
B.S., University of Southern California  
B.S., California State University, Hayward  
M.S., Marymount University

Voth, Joseph (2015)  
*English*  
B.A., M.F.A., California State University, Fresno

Vue, Kau (2017)  
*Political Science*  
B.A., M.A., California State University, Fresno  
M.A., University of California, Merced

Wakelee, Andrew (2022)  
*Librarian*  
B.A., Willamette University, Salem  
MLIS, University of South Carolina, Columbia

Waller, Tammie (2005)  
*Computer Information Technology*  
A.S., West Hills College  
B.S., California State University, Fresno  
M.S., National University

Wasmiller, Peter (2015)  
*Paralegal/Law*  
B.A., Fresno Pacific University  
J.D., San Joaquin College of Law

Watson, Matthew (2011)  
*Chicano-Latino Studies*  
B.A., California State University, Fresno  
J.D., University of California, Berkeley  
School of Law

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

Wengerd, 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, Ria (2015)  
*English*  
B.A., M.F.A., California State University, Fresno

Williams, Shannon (2021)  
*Librarian*  
B.A, California State University, Fresno  
M.S., California State University, East Bay

Willis, 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, Shoua (2014)  
*EOPS Counselor*  
B.A., M.S., California State University, Fresno

Yang, Sue (2020)  
*Instructional Designer*  
B.A., University of Wisconsin, Eau Claire  
M.A., Marian University, Fond du Lac

Yang, Victor Bee (1999)  
*Counselor*  
B.S., University of Nebraska at Omaha  
M.S., National University

Yann, Chamroeun (2021)  
*Child Development*  
B.A., M.A., California State University, Fresno

Yates, Seth (2010)  
*Chemistry*  
B.A., Fresno Pacific University  
M.S., California State University, Fresno

Ybarra, Kerry (2007)  
*Interim Dean of Instruction, Academic Services and Humanities Pathways Division*  
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.Arch., B.S., California Polytechnic University, San Luis Obispo

Zendejas, Frank (2016)  
*Electrical Systems Technology*  
B.S., California State University, Fresno  
Ph.D., University of California, Berkeley
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
</tr>
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<tbody>
<tr>
<td>Erica Abbs</td>
<td>Administrative Assistant</td>
</tr>
<tr>
<td>Aaron Acevedo</td>
<td>Financial Aid Specialist</td>
</tr>
<tr>
<td>Norma Aguilar</td>
<td>Financial Aid Analyst</td>
</tr>
<tr>
<td>Eric Aguiniga</td>
<td>Custodian</td>
</tr>
<tr>
<td>Enrique Alameda</td>
<td>Science Laboratory Coordinator</td>
</tr>
<tr>
<td>Stephanie Alanz</td>
<td>Administrative Assistant</td>
</tr>
<tr>
<td>Horacio Alaniz, Jr.</td>
<td>Custodian</td>
</tr>
<tr>
<td>Jose Alcorta</td>
<td>Custodian</td>
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<tr>
<td>Belladira Alva-Velazquez</td>
<td>Evaluator</td>
</tr>
<tr>
<td>Daniel Amador-Nunez</td>
<td>Career Technical Education Laboratory Technician</td>
</tr>
<tr>
<td>Frank Anaya, III</td>
<td>Career Technical Education Laboratory Technician</td>
</tr>
<tr>
<td>Kristie Andersen</td>
<td>Senior Administrative Services Technician</td>
</tr>
<tr>
<td>Thomas Andrews</td>
<td>Utility Worker</td>
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<tr>
<td>Ivy Arana</td>
<td>Accounting Technician</td>
</tr>
<tr>
<td>Glenn Araki</td>
<td>Career Technical Education Laboratory Technician</td>
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<td>Joanna Arenas</td>
<td>Administrative Assistant</td>
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<tr>
<td>Jeffrey Arends</td>
<td>Program Assistant – Career Technical</td>
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<tr>
<td>Jamien Armstrong</td>
<td>Senior Library Technician</td>
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<tr>
<td>Estevan Arroyo</td>
<td>Custodian</td>
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<tr>
<td>Moses Avila</td>
<td>Audio-Visual Technician</td>
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<tr>
<td>Carrie Baize</td>
<td>Instructional Administrative Assistant</td>
</tr>
<tr>
<td>Brittany Ballard</td>
<td>Senior Program Specialist – Student Services</td>
</tr>
<tr>
<td>Rachel Barcelos</td>
<td>Instructional Assistant</td>
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<td>Arthur Baylon</td>
<td>Custodian</td>
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<td>Virginia Beamer</td>
<td>Financial Aid Specialist</td>
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<tr>
<td>Joshua Beaulieu</td>
<td>Career Technical Education Laboratory Technician</td>
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<td>Lamance Bert</td>
<td>Custodian</td>
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<tr>
<td>Stephanie Bisbee</td>
<td>Nursing Skills Laboratory Technician</td>
</tr>
<tr>
<td>Jocelyne Bonilla</td>
<td>Early Childhood Education Associate</td>
</tr>
<tr>
<td>Kathleen Bonilla</td>
<td>Public Information Officer</td>
</tr>
<tr>
<td>Michael Bourbonais</td>
<td>IT Customer Support Technician</td>
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<tr>
<td>William Bowlin</td>
<td>Senior IT Customer Support Technician</td>
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<tr>
<td>Victoria Bowman</td>
<td>Program Assistant – Student Services</td>
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<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 Monahan-Bremer</td>
<td>Director of Marketing and Communications</td>
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<tr>
<td>Richard Briones</td>
<td>Custodian</td>
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<tr>
<td>Rose Brownell</td>
<td>Outreach Specialist</td>
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<tr>
<td>Johnny Cano III</td>
<td>Theater Technical Director</td>
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<tr>
<td>Jessica L. Capuchino</td>
<td>Office Assistant I</td>
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<tr>
<td>Michelle E. Carter</td>
<td>Early Childhood Education Associate</td>
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<tr>
<td>Lisa Cartwright</td>
<td>Instructional Administrative Assistant</td>
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<td>Michael R. Castro</td>
<td>Print Services Technician</td>
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<td>Victoria Castro</td>
<td>Science Laboratory Coordinator</td>
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<td>Robert Cawley</td>
<td>Audio-Visual Technician</td>
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<td>Steven Centeno</td>
<td>Custodian</td>
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<tr>
<td>Dee Cetin-Berber</td>
<td>Senior Research and Planning Analyst</td>
</tr>
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<td>David Chacon</td>
<td>Custodian</td>
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<tr>
<td>Fennymann Chan</td>
<td>Admissions and Records Specialist</td>
</tr>
<tr>
<td>Samantha Chang</td>
<td>Office Assistant I</td>
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<tr>
<td>Karine Chatard</td>
<td>Instructional Administrative Assistant</td>
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<td>David Clacher</td>
<td>Financial Aid Analyst</td>
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<td>Cindy Clark</td>
<td>Evaluator</td>
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<tr>
<td>Joyce Clark</td>
<td>Administrative Assistant</td>
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<tr>
<td>Nathan Clark</td>
<td>IT Customer Support Technician</td>
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<tr>
<td>Nileen Clark</td>
<td>Curriculum Assistant</td>
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<tr>
<td>Terri Clement</td>
<td>Early Childhood Education Associate</td>
</tr>
<tr>
<td>Cory Condry</td>
<td>Arts Laboratory Technician</td>
</tr>
</tbody>
</table>
Laurie S. Contor Duval  
Costume Shop Manager

Mike Coppedge  
Lead Accounting Technician

Jered Crump  
Custodian

Sylvia Cuevas  
Financial Aid Manager

Christopher Cupp  
Office Specialist

Lilia Danielian  
Program Assistant – Career Technical

Steve DaSilva  
Horticulture Program Specialist

LaShun Davis  
Job Developer

Elizabeth Davitian  
Budget Technician

Rigoberto Delgadillo  
Sign Language Interpreter

Kristen Del Rosario  
Senior Sign Language Interpreter

Julian Delgado  
IT Customer Support Technician

Cindy DeSutter  
Instructional Assistant

Larry Dickson  
Utility Worker

Marta Diliberto  
Instructional Administrative Assistant

Myranda Diquirico  
Financial Aid Specialist

Gladdey Donsanouphit  
Deputy Title IX Coordinator

Andrew Doris  
Athletic Equipment Manager

Mirna Duarte  
Director of Admissions and Records

Tabitha Dubois  
Sign Language Interpreter Coordinator

Cynthia Dunn  
Job Placement Coordinator

Megan Elam  
Executive Assistant

Anthony Estrada  
Custodian

Richard Estrada  
Custodian

George Falcon  
Custodian

April Farkas  
Senior Program Specialist – Career Technical

Leslie Farrell  
Financial Aid Assistant

Beth Fields  
Office Specialist

Kimberley Fischer  
Senior Admissions and Records Assistant

Melissa Flores  
Senior Program Specialist – Student Services

Daniel Foglio  
Career Technical Education Laboratory Technician

Jeffery Foust  
Utility Worker

Jennifer Franklin  
Instructional Administrative Assistant

Tammy Gallagher  
Early Childhood Education Associate

Francisco D. Gamboa  
Athletic Trainer

Stephanie Gamez  
Early Childhood Education Specialist

Jeremiah Ganner  
IT Customer Support Technician

Lili Gao  
Senior Research and Planning Analyst

Claudia Garcia  
Early Childhood Education Specialist

Edith A. Garcia  
Admissions & Records Assistant I

Ernesto Garcia  
Senior Program Specialist – Student Services

Graciela Garcia  
Food Service Worker

Jacque Gaston  
IT Customer Support Technician

Michael Gerard  
Alternate Media Specialist

Maile Glover Martin  
Senior Program Specialist – Student Services

Frank Gonzales  
Custodian

Joseph Gonzales  
Custodian

Simon Gonzalez  
Science Laboratory Coordinator

John Grasmick  
Accounting Technician

Heather Gray  
Office Specialist

Sabrina Gray  
Office Assistant II

Alvin Greathouse  
Custodian

Nancy Gross  
Instructional Administrative Assistant

Omar Gutierrez  
Vice President of Administrative Services

Maria Handy  
Library Operations Coordinator

Aaronn Hansen  
Network Administrator

Charlotte Harmon  
Senior Library Technician

Wilhemina Henderson  
Office Assistant II

Virginia Her  
Accounting Technician

Ze Her  
Administrative Assistant

Martin Herb  
Office Specialist

Abel Hernandez  
Custodian

Andres Hernandez  
Director of Admissions and Records

Christina Hernandez  
Administrative Assistant
Monica Hernandez  
**PE/Athletic Equipment Assistant**

Randal Hernandez  
**Help Desk Technician**

Sheng Herr  
**Senior Accounting Technician**

Kellie Higashida  
**Office Assistant III**

David Holford  
**Athletic Trainer**

Lavell Hopkins  
**Custodian**

Josefa Huckeba  
**Program Assistant – Student Services**

Marissa Hutchinson  
**Administrative Assistant**

Jahazi Ibarra  
**DSP&S Mobility Driver**

Markesha Iversen  
**Program Specialist – Student Services**

Linda Jackson  
**Senior Library Technician**

Fidel Jauregui  
**Custodian**

Dale Jimenez  
**Accounting Technician**

Erica Jimenez  
**Evaluator**

Donnie Johnson  
**Athletic Equipment Manager**

Marvin Jordan, II  
**Custodian**

Sarina Karr  
**Senior Program Specialist – Student Services**

Aarne Kela  
**Piano Accompanist**

Kaylee Kelly  
**Sign Language Interpreter**

Amber Kidder  
**Admissions and Records Assistant I**

Israel Kinlow  
**Financial Aid Specialist**

Cathleen Kozielski  
**Budget Specialist**

Charles Kralowec  
**Research and Planning Analyst**

Christopher Lang  
**Theatre Technical Manager**

Jennifer Laval  
**Director of College Technology Services**

Joseph Lesoulie  
**Senior IT Customer Support Technician**

Melissa Llanes  
**Executive Assistant**

Joe Lopez III  
**Lead Custodian**

Lorraine Lopez  
**Office Specialist**

Stephanie Lopez Pedrosa  
**Senior Admissions and Records Assistant**

Benjamin Lozano  
**Print Media and Communications Manager**

John Luna  
**Custodian**

Rita Luna  
**Office Specialist**

Mayra Machain  
**Budget Technician**

Tamara Maddox  
**Business Office Manager**

Javier Madrigal  
**Senior Sign Language Interpreter**

Sunnie Mahavong  
**Admissions and Records Specialist**

Rosemary Mahoney  
**Admissions and Records Specialist**

Delia Makel  
**Digital Media and Graphic Designer**

Hilary Malveaux  
**Budget Technician**

Josephine Mancillas-Llanos  
**Scholarship Specialist**

Rebecca Manning  
**Admissions and Records Assistant I**

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**

Luis Jauregui Martinez  
**Custodian**

Patricia Martinez  
**Instructional Assistant**

Tiffany Martinez  
**Early Childhood Education Specialist**

Celia Martinez-Pantoja  
**Office Specialist**

Mary Mathos  
**Financial Aid Specialist**

Keelin McCabe  
**Executive Assistant**

Rosemary McDonald  
**Budget Technician**

Samantha McGregor  
**Admissions and Records Assistant**

Jennifer McKenzie  
**Administrative Assistant**

Mark McNiff  
**Senior Program Specialist – Student Services**

Jason Mendez  
**Digital Media and Graphic Designer**

Barbara Mendoza  
**Program Assistant – Student Services**

Rebecca R. Messer  
**Piano Accompanist**

Tamra Miller  
**Administrative Assistant**

Richard Mora  
**Administrative Assistant**

Jeannie Morgan  
**Budget Technician**
Gold Moua  
Office Specialist

Jennifer Mtunga  
Box Office Manager

Haneen Musleh  
Sign Language Interpreter

Stephanie Murray  
Payroll Technician

Sarah Nance  
Administrative Assistant

Jennifer Nassar  
Accounting Technician

Elvira Navarro-Arellano  
Program Specialist – Student Services

Nathan Newsom  
Lead 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

Amber Olmo  
Custodian

Francisco Olvera  
Custodian

Christopher Orr  
Custodial Manager

Aleemario Padua  
Budget Specialist

Daisy Pelayo Figueroa  
Admissions & Records Assistant I

Denee Perea  
Program Assistant – Student Services

Miguel Perez  
Custodian

Jacquelyn N. Peters  
Office Assistant I

Joshua Petersen  
Senior Library Technician

Maria Petrogonas  
Early Childhood Education Associate

Henry Polanco, Jr.  
Custodian

Nicole Pondexter  
Office Specialist

Ronald Potter, Jr.  
Utility Worker

Stephanie Powers-Puahi  
Administrative Assistant

Carlos Puente, Jr.  
Custodian Manager

Sadie Pursell  
Administrative Services Technician I

Kim Quesada  
Executive Assistant to the President

Ana Quinata  
Instructor Administrative Assistant

Carol Rains-Heisdorf  
Senior Research and Planning Analyst

Emily R. Rand  
Athletic Trainer

Charles Record  
Custodian

Stephani Reed  
Custodian

Hilda Reyna  
Senior Program Specialist – Student Services

Judith Rios  
Veterans Services Specialist

Brianna Rivera  
Program Assistant – Career Technical

Melody Riversmith  
Office Specialist

Andrew Rocha  
IT Customer Support Technician

Heather Rodriguez  
Financial Aid Specialist

Amanda Romero  
Financial Aid Specialist

Ryan Rooks  
IT Customer Support Technician

Roy Rosa  
Financial Aid Specialist

Arisbet Ruiz  
Financial Aid Analyst

Harold Russell III  
Admissions and Records Manager

Miguel Sanchez  
Utility Worker

Penny Sandlin  
Senior Budget Analyst

Delfina Sandoval  
Program Assistant – Career Technical

Suzanne Sankey  
Program Assistant – Career Technical

Jeffrey Santillano  
Instructional Computer Laboratory Technician

Frances Santillian  
Custodian

David Scholl  
Program Assistant – Student Services

Roland Schreiner  
Systems Administrator

Lorraine Sepeda  
Job Developer

Kimeca Simmons  
Sign Language Interpreter

Larry Simpson  
Warehouse Worker

Anthony Slade  
Custodian

Phila So  
Office Assistant II

Eddie Standifer II  
Custodian

Julie Steele  
Admissions and Records Assistant I

Mark Tabay  
Student Communications Specialist

Bobbie Tello-Perez  
Admissions and Records Specialist
Angel Tercero
Custodian

Meng Thao
PE/Athletic Equipment Assistant

Monica Torres
Office Assistant I

Paul Torres
Food Pantry Coordinator

Andrea Torrez
Office Specialist

Robert Torrez
Assessment Coordinator

Christopher Tripp
Senior IT Customer Support Technician

Rosie Castine Tumoine
Instructional Administrative Assistant

Alma Valdes Ochoa
Evaluator

Patricia Valdez
Sign Language Interpreter

Ruthann Van Buren
Office Specialist

Majru Varughese
Science Laboratory Coordinator

Luis Villanueva
Custodian

Joel Villar
Career Technical Education Laboratory Technician

Lisa Vincent
Outreach Specialist

Maribel Viveros
Senior Research and Planning Analyst

Wa Vue
Nursing Simulations Technician

Chelsey White
Senior Sign Language Interpreter

Maria Wiget
Instructional Assistant

Artie Williams
Lead Custodian

Jonathan Wilson
Academic Technology Systems Specialist

Rachel Witort
Sign Language Interpreter

Charmaine Wojitas
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

Becky Xiong
Executive Assistant

Moua Xiong
Senior Library Technician

Jennifer Xiong-Moua
Program Specialist – Student Services

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

Maira Zavala
Evaluator

Brittany Zenz
Administrative Assistant
Emeritus Faculty

Aguilar, Luis E.  
1985-2014  
Automotive Collision Repair (CTC)

Albright, Linda S.  
1981-2009  
Nurse

Alvarado, Samuel L.  
2004-2021  
Counselor, Disabled Students Programs & Services

Alvarez, Manuel E.  
1971-1992  
Electronics

Amaro, Arthur N.  
1973-2011  
Chicano-Latino Studies, Sociology

Andersen, L. LeGrand  
1974-1999  
Vocal Music

Andreen, Kristi  
2000-2011  
Respiratory Therapy

Andrews, Robert N.  
1971-1996  
Automotive Technology, Industrial Education

Angarano, Angelo P.  
1968-1984  
Philosophy, English

Arakelian, Charlotte A.  
1983-2018  
Counselor

Arredondo, Alfred V.  
1975-2008  
Counselor

Arroyo, Robert F.  
1969-1999  
Associate Dean of Students, Director, EOP&S

Arth, Raymond G.  
1977-2010  
Photography

Atkinson, Dennis. C.  
1990-2008  
Automotive Technology

Azamber, Eugene C.  
1966-2001  
Business Administration, Management

Baber, Roberta  
1986-2011  
Computer Information Technology

Badertscher, Lynn  
1994-2017  
Communication

Bates, Robyn L.  
1990-2015  
Art

Beck, Allen  
1974-2008  
Anthropology

Bell, Calvin  
1968-1984  
Counselor

Bell, Edward  
1979-1986  
Auto Mechanics

Benefiel, Diane M.  
2004-2022  
Nursing

Bengel, Earl  
1968-1997  
Engineering

Bertolani Jr., William J.  
1987-2016  
Criminology

Bigham, Craig  
1999-2019  
Mathematics

Bill, Gerald M.  
1970-2008  
Sociology

Bingham, Isabell H.  
1970-1982  
Home Economics

Blackburn, Norma D.  
1961-1979  
Legal Secretaryship

Bluth, Gary  
1991-2020  
Physical Education

Bolt, Sandra B.  
1999-2016  
Business & Technology

Boucher, Richard  
1964-1996  
Electronic Technology

Bourdet, Malcolm L.  
1957-1990  
Physical Education

Boyd, Robert  
1996-2017  
Philosophy

Brennan, Jennifer A.  
2004-2014  
Nurse

Breuer, Melinda  
2001-2019  
Child Development

Brooks, Walter  
1970-2008  
Counselor

Brotsis, William  
2007-2020  
Fire Technology

Brown, Martin D.  
1974-1990  
Associate Dean of Instruction, Health Arts and Sciences

Brown, Richard S.  
1964-1986  
Geology

Brunetti, Pat A.  
1982-2004  
Nurse

Bruns, Paul M.  
1958-1990  
Chemistry

Bugay, Elnora  
1995-2016  
Nursing

Byrd, Ronald F.  
1968-2001  
Librarian

Byrns, Dennis C.  
1995-2011  
Fire Technology

Campbell, Lynn  
2001-2017  
English

Carlisle, Elizabeth  
2005-2007  
Speech

Carroll, Jean (2001)  
2001-2020  
English for Multi-Lingual Students

Castagna, Paula  
1992-2011  
Mathematics
Cerda, Ricarda  
2000-2017  
Food & Nutrition

Cerkueira, Ronald C.  
1996-2020  
Computer Aided Drafting & Design

Chandler, Donna  
2001-2022  
Librarian

Chaney, Lisa  
2014-2018  
Coordinator, Health Services

Chavez, Kenneth R.  
1988-2020  
Counselor

Cheney, Lisa  
2014-2018  
Coordinator, Health Services

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

Cummins, John H.  
1996-2011  
Vice President, Admissions and Records

Curry, Ruth  
1981-1998  
Philosophy, English, Humanities

Dana, Michael E.  
1990-2018  
Music

Dav, Thelma L.  
1965-1973  
English

DeAnda, Carolyn  
2010-2021  
Photography

Deeter, Gary  
1981-2008  
Music

DeKoning, Richard M.  
1958-1982  
Drafting, Mathematics, Architecture, Industrial Education

Demett, Paula  
2000-2019  
Librarian

Denny, Monta  
1986-2019  
Dental Hygiene

DePry, Ronald N.  
1970-1993  
Biology

DeSantiago-Gomez, Laura  
1999-2019  
Counselor

Dickie, David R.  
1965-1996  
Drafting, Industrial Education

Dose, Kenneth D.  
1971-1999  
Physical Education

Dotts, John  
1981-1996  
Industrial Education, Construction, Mathematics

Doud, Laurel M.  
2005-2021  
Librarian

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

Draper, 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

Edwards, Sarah  
1998-2020  
Health Information Technology

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 Program & Services

Engel, Kathleen
1980-2008
Nursing

Engstrom, Dale
2001-2016
Music

Erven, Debra P.
1990-2020
Theatre Arts

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

Ferrer, Sharon
1995-2021
Spanish

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
1985-1991
Health Education, Track

Fuller, Pauline M.
1977-2013
Counselor

Gaither, Loren F.
1984-1996
Mathematics

Gana, 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

Gose, Kristine
2001-2021
Child Development

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
1968-2002
Psychology

Handley, Richard
1955-1980
Associate Dean of Instruction, Occupational Education

Hanson, William F.
1946-1978
Director, Vocational Training Center

Hao, Jian-Min
2006-2021
Dance

Harmon, Beverlee Jill
1990-2012
Counselor

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

Hernandez, Timothy
2013-2021
Art

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

Hodges, Cynthia  
1990-2022  
American Sign Language

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

Hubbard, Greg  
2006-2020  
Photography

Huneault-Schultze, Sylvie  
2001-2022  
English for Multi-Lingual Students

Jamison, Gregory  
1997-2022  
Mathematics

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, Sarbjit  
1999-2018  
Political Science

Johnson, Frederick  
2008-2021  
Police Academy Coordinator

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

Kirchhart, Jerry L.  
1989-2005  
Biology

Kizzior, Robert  
1999-2012  
Art, Ceramics

Klein, Kenneth A.  
1968-1999  
Architectural Drafting

Koshe, Jeannine  
2005-2019  
Geography

Krauter, Larry  
2008-2017  
Photography

Kriesel, 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

Maruko, Eiji  
1976-1997  
Music

Mascareñas, Timothy E.  
1971-2004  
Automotive Technology

Mateo-Laeno, Mary Ann  
1990-2007  
Child Development

Mattox, Jack V.  
1966-2001  
Health Science

McClain, 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

Mericle, Margaret E.  
1999-2020  
Dean of Instruction, Social Sciences

Merlier, Christiane M.  
1984-2008  
ESL, French

Meserve, Peter  
2001-2018  
Geography

Meyer, Kent R.  
1962-1987  
Accounting

Miller, Bruce A.  
1996-2021  
Electrical Systems Technology

Miller, Mary E.  
1960-1984  
Secretarial Science

Miller, Mary Beth  
2001-2021  
Child Development

Minar, Cynthia “Jill”  
2000-2020  
Anthropology/Archeology

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

Moses, John  
1999-2021  
English/Film

Muldoon, Marcia  
1995-2006  
English

Munoz, Shana  
2001-2019  
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  
Nelson, Carl C.  
1966-1994  
Biology  
Neuman, Darlene H.  
1962-2000  
Business & Technology  
Newcomb, Joan T.  
1971-2001  
Sociology, Child Development  
Nelson, Carl C.  
1966-1994  
Biology  
Neuman, Darlene H.  
1962-2000  
Business & Technology  
Newcomb, Joan T.  
1971-2001  
Sociology, Child Development  
Nie, Stanley B.  
1990-2005  
Welding, Metal Fabrication  
Nelson, Carl C.  
1966-1994  
Biology  
Neuman, Darlene H.  
1962-2000  
Business & Technology  
Newcomb, Joan T.  
1971-2001  
Sociology, Child Development  
Nelson, Carl C.  
1966-1994  
Biology  
Neuman, Darlene H.  
1962-2000  
Business & Technology  
Newcomb, Joan T.  
1971-2001  
Sociology, Child Development  
Nie, Stanley B.  
1990-2005  
Welding, Metal Fabrication  
Nelson, Carl C.  
1966-1994  
Biology  
Neuman, Darlene H.  
1962-2000  
Business & Technology  
Newcomb, Joan T.  
1971-2001  
Sociology, Child Development  
Nie, Stanley B.  
1990-2005  
Welding, Metal Fabrication  
Owens, Daniel L.  
1999-2021  
Computer Information Technology  
Owens, Kenneth B.  
1963-1999  
Art  
Palmieri, Richard  
1990-2021  
Biology  
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 E.  
1999-2019  
Geology  
Porter, Ralph W.  
1971-2003  
Biological  
Priewisch, Alexandra  
2017-2021  
Geology  
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  
Rah, Lester DeWayne  
1971-2000  
Director, Arts, Honors & Student Success  
Ramay, Morris W.  
1972-2000  
Respiratory Care  
Ramirez, Graciela  
1996-2022  
Counselor  
Ramon, Frank  
1972-2010  
Director, Financial Aid  
Rawate, Prabhu  
1990-2005  
Chemistry  
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

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, Jeannie  
2009-2019  
English

Santos, Richard  
1994-2019  
Linguistics, English for Multi-Lingual Students

Sause, James  
2000-2021  
Computer Information Technology

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

Siroky, Allen  
1999-2021  
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Smith, Bernice V.  
1972-1978  
Librarian

Smith, Bonnie  
1996-2019  
Computer Information Technology

Smith, Dorothy E.  
1965-1978  
Nursing

Smith, Mary  
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Nurse

Smith, Shannon  
1958-1980  
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Solwazi, Kehinde  
1970-2011  
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1976-1978  
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Sousa, Daniel J.  
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1948-1978  
Music

Spolsdoff, John  
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Director, Student Success & Honors

Staebler, Diane  
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1972-1999  
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1964-1984  
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1962-1984  
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Stephenson, Wendell  
1999-2019  
Philosophy

Stone, Carol J.  
1990-2010  
Home Economics

Stubblefield, Gertrude  
1930-1960  
Secretarial Science
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Conrad M. Discont, English Instructor
Vahack Haroutunian, Mathematics Instructor
H. Bruce Johnston, Biology Instructor
Cynthia Peek, Tutorial Assistant
Carl D. Waddle, Associate Dean of Instruction, Humanities, Health Sciences & the Arts

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

Weidenhofer, Hans
1948-1984
Director of Athletics, Physical Education

Whitt, C. Thomas
1969-2001
Criminology

Williams, Rhonda
1999-2022
Physical Education

Wilson, Vernon L.
1976-1988
Radiologic Technology

Woodman, Joseph B.
1948-1976
Auto Mechanics

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1971-1984
English

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1989-1999
Medical Assisting, Health Information Technology

Wosika, Kathleen A.
1975-2012
Art

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1984-2003
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1997-2014
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Yates, Susan
1984-2013
Athletic Director, Physical Education

Young, Nain T.
1962-1984
Registered Nursing

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1969-1995
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Aeikens, Patricia
1983-2016
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Student Services Specialist

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Anderson, Robin
1979-2011
Department Secretary

Andrews-Boock, Sharon
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1990-2004
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Baiz, Edward
2006-2018
General Utility Worker

Barber, Joan
1974-2007
Office Assistant III

Barile, Howard
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Barrick, Karin
2003-2011
Textbook Purchasing Clerk

Barrett, Jeffrey
2004-2019
Theatre Technical Director

Battcher, Shirley
1999-2011
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Belk, James
1982-2004
Library/Learning Resources Assistant III

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College Relations Specialist

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Custodian

Bogdanoff, Gerald
1980-2004
Electronics/Microcomputer Technician

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Cook David
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Print Services Technician

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Athletic Equipment Manager

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Job Developer

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1997-2017
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Print Media & Communications Manager

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1970-2018
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2000-2020
Early Childhood Education Specialist

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1987-2013
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1992-2019
Bookstore Sales Associate

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1988-2012  
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Senior Admissions and Records Assistant

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Educational Advisor

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1990-2010  
Department Secretary

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1992-2008  
School Relations Specialist

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1972-2018  
Assessment Coordinator

Harris, Elizabeth  
1980-2005  
Administrative Assistant

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1990-2015  
Textbook Purchasing Clerk

Harrison, Richard  
1990-2015  
Print, Media & Communications Manager

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2005-2021  
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2009-2020  
Program Assistant – Career Technical

Jimenez, Jess  
1997-2004  
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Financial Assistant I

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Senior Program Specialist – Career Technical

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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

Kubo, Renee  
1990-2021  
Senior Library Technician

Larsen, Dale  
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Financial Aid Assistant

La Voie, Charles  
1990-2013  
Micro-Computer Resource Technician

Lewis, Jo  
2010-2021  
Administrative Assistant

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

Lyness, Linda  
2006-2021  
Payroll Technician

Mallory, Lynn  
1980-2016  
Administrative Assistant

Mangum, Pearl  
1990-2019  
Instructional Administrative Assistant

Mattern, Mary  
1998-2021  
Early Childhood Education Specialist

McCollum, Debra  
2002-2019  
Phone Communications Operator II

McKibben, Shannon  
1994-2020  
Executive Assistant

McSwain-Tennent, Holly  
1997-2005  
Administrative Aide

Mendoza, Linda  
1993-2013  
Office Assistant III

Miller, Donna  
1985-2003  
Business Facilities Assistant

Miller, Toni O.  
1973-2004  
Educational Advisor

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1983-2008  
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<td>1974-2014</td>
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<td>1987-2011</td>
<td>Duplicating Operations Technician</td>
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<td>2001-2022</td>
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<td>1975-2007</td>
<td>Secretary to the President</td>
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<td>2001-2016</td>
<td>Accounting Technician I</td>
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<td>Riegel, Rhea</td>
<td>2001-2012</td>
<td>Institutional Research Coordinator</td>
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<td>Rivera, Donna</td>
<td>1973-2009</td>
<td>Assistant Bookstore Manager</td>
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<td>1998-2010</td>
<td>Job Development</td>
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<td>Rogers, Phyllis</td>
<td>2006-2016</td>
<td>Office Assistant II</td>
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<td>2003-2018</td>
<td>Athletic Equipment Manager</td>
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<td>Ruby, Michelle</td>
<td>1990-2016</td>
<td>Assessment Coordinator</td>
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<td>Sanchez, Silvia</td>
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<td>Administrative Assistant</td>
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<td>Slevkoff, Hazel</td>
<td>1970-2006</td>
<td>Curriculum Assistant</td>
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<td>1995-2017</td>
<td>Bookstore Sales Clerk III</td>
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<td>Sullivan, Francis</td>
<td>1975-2003</td>
<td>Theatre Manager</td>
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<td>Supersad, Pearl</td>
<td>1972-2011</td>
<td>Department Secretary</td>
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<td>Swan, Kathleen</td>
<td>2000-2021</td>
<td>Administrative Assistant</td>
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<td>Taylor, Gail</td>
<td>1997-2011</td>
<td>Administrative Aide</td>
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<td>Tibbet, Pamela</td>
<td>1993-2022</td>
<td>Senior Program Specialist – Student Services</td>
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<td>Uribes, Regina</td>
<td>1999-2011</td>
<td>College Relations Specialist</td>
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<td>Van Dyken, Robert</td>
<td>2003-2014</td>
<td>Custodian</td>
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<td>Van Galder, Ann</td>
<td>1996-2016</td>
<td>Office Assistant III</td>
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<td>Vargas, Sandra</td>
<td>1973-2011</td>
<td>Campus Business Assistant</td>
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<td>Vennard, Michael</td>
<td>1992-2005</td>
<td>Instructional Technical-Reprographics</td>
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<td>Willingham, Tandy</td>
<td>1982-2004</td>
<td>Library/Learning Resources Assistant III</td>
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<td>Willis, Carole</td>
<td>1999-2004</td>
<td>Office Assistant I</td>
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<td>Whisenhunt, Lydia</td>
<td>1969-2010</td>
<td>Secretary to the President</td>
</tr>
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<td>Whittle, Oscar</td>
<td>1987-2013</td>
<td>Custodian</td>
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<td>Willis, Phyllis</td>
<td>1999-2021</td>
<td>Administrative Assistant</td>
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<td>Withrow, Nancy</td>
<td>2002-2020</td>
<td>Senior Admissions and Records Assistant</td>
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<td>Zapata, Ramon</td>
<td>1996-2022</td>
<td>Career Technical Education Laboratory Technician - Automotive</td>
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